Do Heui Kim

List of Publications by Year
in descending order

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Version: 2024-02-01

185 papers	7,695 citations	61984 43 h-index	62596 80 g-index
186 all docs	186 docs citations	186 times ranked	6864 citing authors

#	Article	IF	Citations
1	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
2	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
3	Thermal durability of Cu-CHA NH3-SCR catalysts for diesel NO reduction. Catalysis Today, 2012, 184, 252-261.	4.4	245
4	HRTEM Study of diesel soot collected from diesel particulate filters. Carbon, 2007, 45, 70-77.	10.3	239
5	Recent advances in catalytic co-pyrolysis of biomass and plastic waste for the production of petroleum-like hydrocarbons. Bioresource Technology, 2020, 310, 123473.	9.6	199
6	How Pt Interacts with CeO₂ under the Reducing and Oxidizing Environments at Elevated Temperature: The Origin of Improved Thermal Stability of Pt/CeO₂ Compared to CeO₂. Journal of Physical Chemistry C, 2016, 120, 25870-25879.	3.1	185
7	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
8	Effect of Preparation Method and Redox Treatment on the Reducibility and Structure of Supported Ceriaâ€“Zirconia Mixed Oxide. Journal of Catalysis, 2002, 209, 417-426.	6.2	162
9	Activation of Pd/SSZ-13 catalyst by hydrothermal aging treatment in passive NO adsorption performance at low temperature for cold start application. Applied Catalysis B: Environmental, 2017, 212, 140-149.	20.2	127
10	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
11	Effects of La₂O₃ on the Mixed Higher Alcohols Synthesis from Syngas over Co Catalysts: A Combined Theoretical and Experimental Study. Journal of Physical Chemistry C, 2011, 115, 17440-17451.	3.1	119
12	NO2Adsorption on BaO/Al2O3:Â The Nature of Nitrate Species. Journal of Physical Chemistry B, 2005, 109, 27-29.	2.6	117
13	Catalytic Copyrolysis of Cellulose and Thermoplastics over HZSM-5 and HY. ACS Sustainable Chemistry and Engineering, 2016, 4, 1354-1363.	6.7	113
14	Understanding the effect of Pd size on formic acid dehydrogenation via size-controlled Pd/C catalysts prepared by NaBH4 treatment. Applied Catalysis B: Environmental, 2019, 244, 684-693.	20.2	108
15	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
16	Metallic phases of cobalt-based catalysts in ethanol steam reforming: The effect of cerium oxide. Applied Catalysis A: General, 2009, 355, 69-77.	4.3	99
17	The different impacts of SO2 and SO3 on Cu/zeolite SCR catalysts. Catalysis Today, 2010, 151, 266-270.	4.4	96
18	Effect of Co/Ni ratios in cobalt nickel mixed oxide catalysts on methane combustion. Applied Catalysis A: General, 2015, 505, 62-69.	4.3	89

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19	Investigation of the active sites and optimum Pd/Al of Pd/ZSMâ€“5 passive NO adsorbers for the cold-start application: Evidence of isolated-Pd species obtained after a high-temperature thermal treatment. Applied Catalysis B: Environmental, 2018, 226, 71-82.	20.2	89
20	Deactivation mechanisms of Pt/Pd-based diesel oxidation catalysts. Catalysis Today, 2012, 184, 197-204.	4.4	86
21	Catalytic hydrodeoxygenation of 2-methoxy phenol and dibenzofuran over Pt/mesoporous zeolites. Energy, 2015, 81, 33-40.	8.8	83
22	Facile Synthesis of KFI-type Zeolite and Its Application to Selective Catalytic Reduction of NO_x with NH₃. ACS Catalysis, 2017, 7, 6070-6081.	11.2	83
23	Effect of various activation conditions on the low temperature NO adsorption performance of Pd/SSZ-13 passive NOx adsorber. Catalysis Today, 2019, 320, 175-180.	4.4	81
24	In Situ Elucidation of the Active State of Coâ€“CeO_x Catalysts in the Dry Reforming of Methane: The Important Role of the Reducible Oxide Support and Interactions with Cobalt. ACS Catalysis, 2018, 8, 3550-3560.	11.2	80
25	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
26	Effects of microporous TiO 2 support on the catalytic and structural properties of V 2 O 5 /microporous TiO 2 for the selective catalytic reduction of NO by NH 3. Applied Catalysis B: Environmental, 2017, 210, 421-431.	20.2	78
27	Water-induced formation of cobalt oxides over supported cobalt/ceriaâ€“zirconia catalysts under ethanol-steam conditions. Journal of Catalysis, 2010, 273, 229-235.	6.2	77
28	Synergistic effect of non-thermal plasmaâ€“catalysis hybrid system on methane complete oxidation over Pd-based catalysts. Chemical Engineering Journal, 2015, 259, 761-770.	12.7	72
29	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
30	Influence of the Defect Concentration of Ceria on the Pt Dispersion and the CO Oxidation Activity of Pt/CeO₂. Journal of Physical Chemistry C, 2018, 122, 4972-4983.	3.1	62
31	Hydrogen Production from Ethanol Steam Reforming Over Supported Cobalt Catalysts. Catalysis Letters, 2008, 122, 295-301.	2.6	61
32	Effect of reduction treatments (H2 vs. CO) on the NO adsorption ability and the physicochemical properties of Pd/SSZ-13 passive NOx adsorber for cold start application. Applied Catalysis A: General, 2019, 569, 28-34.	4.3	61
33	Comparative study of the mobility of Pd species in SSZ-13 and ZSM-5, and its implication for their activity as passive NO_x adsorbers (PNAs) after hydro-thermal aging. Catalysis Science and Technology, 2019, 9, 163-173.	4.1	58
34	Excellent sulfur resistance of Pt/BaO/CeO2 lean NOx trap catalysts. Applied Catalysis B: Environmental, 2008, 84, 545-551.	20.2	55
35	Effect of oxidation states of vanadium precursor solution in V2O5/TiO2 catalysts for low temperature NH3 selective catalytic reduction. Catalysis Today, 2014, 232, 185-191.	4.4	55
36	Low temperature NO adsorption over hydrothermally aged Pd/CeO2 for cold start application. Catalysis Today, 2018, 307, 93-101.	4.4	55

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37	Understanding the dynamic behavior of acid sites on TiO2-supported vanadia catalysts via operando DRIFTS under SCR-relevant conditions. Journal of Catalysis, 2020, 382, 269-279.	6.2	53
38	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
39	Title is missing!. Catalysis Letters, 2000, 70, 35-41.	2.6	49
40	Simple physical mixing of zeolite prevents sulfur deactivation of vanadia catalysts for NOx removal. Nature Communications, 2021, 12, 901.	12.8	49
41	Mechanistic insights on aqueous formic acid dehydrogenation over Pd/C catalyst for efficient hydrogen production. Journal of Catalysis, 2020, 389, 506-516.	6.2	48
42	NO x uptake mechanism on Pt/BaO/Al2O3 catalysts. Catalysis Letters, 2006, 111, 119-126.	2.6	46
43	Synthesis of nanoporous zirconium oxophosphate and application for removal of U(VI). Water Research, 2007, 41, 3217-3226.	11.3	45
44	Ordered mesoporous MCo2O4 (M = Cu, Zn and Ni) spinel catalysts with high catalytic performance for methane combustion. Journal of Molecular Catalysis A, 2017, 426, 68-74.	4.8	44
45	Changes in Ba Phases in BaO/Al2O3 upon Thermal Aging and H2O Treatment. Catalysis Letters, 2005, 105, 259-268.	2.6	43
46	Improving NOx storage and CO oxidation abilities of Pd/SSZ-13 by increasing its hydrophobicity. Applied Catalysis B: Environmental, 2020, 277, 119190.	20.2	43
47	Effect of niobium oxide phase on the furfuryl alcohol dehydration. Catalysis Communications, 2017, 97, 65-69.	3.3	42
48	Controlling Catalytic Selectivity Mediated by Stabilization of Reactive Intermediates in Small-Pore Environments: A Study of Mn/TiO₂ in the NH₃-SCR Reaction. ACS Catalysis, 2020, 10, 12017-12030.	11.2	40
49	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
50	Effect of pore structure of TiO 2 on the SO 2 poisoning over V 2 O 5 /TiO 2 catalysts for selective catalytic reduction of NO x with NH 3. Catalysis Today, 2018, 303, 19-24.	4.4	39
51	Improved catalytic performance and resistance to SO2 over V2O5-WO3/TiO2 catalyst physically mixed with Fe2O3 for low-temperature NH3-SCR. Catalysis Today, 2021, 376, 95-103.	4.4	37
52	Chemisorption of NH₃ on Monomeric Vanadium Oxide Supported on Anatase TiO₂: A Combined DRIFT and DFT Study. Journal of Physical Chemistry C, 2018, 122, 16674-16682.	3.1	36
53	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
54	Possible origin of improved high temperature performance of hydrothermally aged Cu/beta zeolite catalysts. Catalysis Today, 2012, 184, 245-251.	4.4	35

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55	Hydrogen production by steam reforming of ethanol over Niâ€“X/Al 2 O 3 â€“ZrO 2 (X = Mg, Ca, Sr, and Ba) xerogel catalysts: Effect of alkaline earth metal addition. Journal of Molecular Catalysis A, 2016, 415, 151-159.	4.8	35
56	Effect of sulfur aging and regeneration on low temperature NO adsorption over hydrothermally treated Pd/CeO 2 and Pd/Ce 0.58 Zr 0.42 O 2 catalysts. Catalysis Today, 2017, 297, 53-59.	4.4	35
57	Characteristics of the Pd-only three-way catalysts prepared by solâ€“gel method. Catalysis Today, 1999, 53, 575-582.	4.4	34
58	Enhanced yield of benzene, toulene, and xylene from the co-aromatization of methane and propane over gallium supported on mesoporous ZSM-5 and ZSM-11. Fuel, 2019, 251, 404-412.	6.4	33
59	Mobility of Cu Ions in Cu-SSZ-13 Determines the Reactivity of Selective Catalytic Reduction of NO_x with NH₃. Journal of Physical Chemistry Letters, 2021, 12, 3210-3216.	4.6	33
60	Effect of pH in a solâ€“gel synthesis on the physicochemical properties of Pdâ€“alumina three-way catalyst. Applied Catalysis B: Environmental, 2000, 26, 285-289.	20.2	31
61	Catalytic hydrothermal conversion of macroalgae-derived alginate: effect of pH on production of furfural and valuable organic acids under subcritical water conditions. Journal of Molecular Catalysis A, 2015, 399, 106-113.	4.8	31
62	Effect of Si/Al 2 ratios in Mo/H-MCM-22 on methane dehydroaromatization. Applied Catalysis A: General, 2018, 552, 11-20.	4.3	31
63	Hydrogen production from formic acid dehydrogenation over a Pd supported on N-doped mesoporous carbon catalyst: A role of nitrogen dopant. Applied Catalysis A: General, 2020, 608, 117887.	4.3	31
64	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
65	Adsorption and Formation of BaO Overlayers on Î³-Al₂O₃ Surfaces. Journal of Physical Chemistry C, 2008, 112, 18050-18060.	3.1	29
66	Effects of Molecular and Electronic Structures in CoO_x/CeO₂ Catalysts on NO Reduction by CO. Journal of Physical Chemistry C, 2019, 123, 7166-7177.	3.1	29
67	Oxidation of C3H8, iso-C5H12 and C3H6 under near-stoichiometric and fuel-lean conditions over aged Ptâ€“Pd/Al2O3 catalysts with different Pt:Pd ratios. Applied Catalysis B: Environmental, 2019, 251, 283-294.	20.2	29
68	Roles of ZrO2 in SO2-poisoned Pd/(Ce-Zr)O2 catalysts for CO oxidation. Catalysis Today, 2015, 258, 518-524.	4.4	28
69	Comparison of NOx Adsorption/Desorption Behaviors over Pd/CeO2 and Pd/SSZ-13 as Passive NOx Adsorbers for Cold Start Application. Emission Control Science and Technology, 2019, 5, 172-182.	1.5	28
70	NOx uptake on alkaline earth oxides (BaO, MgO, CaO and SrO) supported on Î³-Al2O3. Catalysis Today, 2008, 136, 121-127.	4.4	27
71	Characteristics of Ptâ€“K/MgAl2O4 lean NOx trap catalysts. Catalysis Today, 2012, 184, 2-7.	4.4	27
72	Investigation on the enhanced catalytic activity of a Ni-promoted Pd/C catalyst for formic acid dehydrogenation: effects of preparation methods and Ni/Pd ratios. RSC Advances, 2018, 8, 2441-2448.	3.6	27

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73	Depolymerization of Protobind lignin to produce monoaromatic compounds over Cu/ZSM-5 catalyst in supercritical ethanol. Molecular Catalysis, 2017, 442, 140-146.	2.0	26
74	Synthesis of butenes through 2-butanol dehydration over mesoporous materials produced from ferrierite. Catalysis Today, 2012, 185, 191-197.	4.4	25
75	One-pot conversion of alginic acid into furfural using Amberlyst-15 as a solid acid catalyst in Î³-butyrolactone/water co-solvent system. Environmental Research, 2020, 187, 109667.	7.5	25
76	Suppressed N2O formation during NH3 selective catalytic reduction using vanadium on zeolitic microporous TiO2. Scientific Reports, 2015, 5, 12702.	3.3	24
77	Direct catalytic conversion of brown seaweed-derived alginic acid to furfural using 12-tungstophosphoric acid catalyst in tetrahydrofuran/water co-solvent. Energy Conversion and Management, 2016, 118, 135-141.	9.2	24
78	Upgrading bio-oil model compound over bifunctional Ru/HZSM-5 catalysts in biphasic system: Complete hydrodeoxygenation of vanillin. Journal of Hazardous Materials, 2022, 423, 126525.	12.4	24
79	Hydrothermal conversion of macroalgae-derived alginate to lactic acid catalyzed by metal oxides. Catalysis Science and Technology, 2016, 6, 1146-1156.	4.1	23
80	The existence of dual Cu site involved in the selective catalytic reduction of NO with propene on Cu/ZSM-5. Catalysis Letters, 1996, 42, 177-184.	2.6	22
81	Role of oxygen on NOx SCR catalyzed over Cu/ZSM-5 studied by FTIR, TPD, XPS and micropulse reaction. Catalysis Today, 1998, 44, 47-55.	4.4	22
82	Production of furfural from macroalgae-derived alginic acid over Amberlyst-15. Journal of Molecular Catalysis A, 2016, 423, 264-269.	4.8	22
83	Inter-particle migration of Cu ions in physically mixed Cu-SSZ-13 and H-SSZ-13 treated by hydrothermal aging. Reaction Chemistry and Engineering, 2019, 4, 1059-1066.	3.7	22
84	Time-resolved observation of V₂O₅/TiO₂ in NH₃-SCR reveals the equivalence of BrÃ¸nsted and Lewis acid sites. Chemical Communications, 2020, 56, 15450-15453.	4.1	22
85	Lean NO_x reduction by CO at low temperature over bimetallic IrRu/Al₂O₃ catalysts with different Irâ€‰:â€‰Ru ratios. Catalysis Science and Technology, 2020, 10, 2120-2136.	4.1	22
86	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
87	BTX production by coaromatization of methane and propane over gallium oxide supported on mesoporous HZSM-5. Molecular Catalysis, 2017, 439, 134-142.	2.0	21
88	Sulfur resistance of Ca-substituted LaCoO3 catalysts in CO oxidation. Molecular Catalysis, 2019, 468, 148-153.	2.0	21
89	Deactivation of Pd/Zeolites passive NOx adsorber induced by NO and H2O: Comparative study of Pd/ZSM-5 and Pd/SSZ-13. Catalysis Today, 2021, 360, 350-355.	4.4	21
90	Effect of surfactant, HCl and NH3 treatments on the regeneration of waste activated carbon used in selective catalytic reduction unit. Journal of Industrial and Engineering Chemistry, 2015, 32, 109-112.	5.8	20

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91	Synthesis of terraced and spherical MgO nanoparticles using flame metal combustion. Powder Technology, 2017, 305, 132-140.	4.2	20
92	Effects of Ni loading on the physicochemical properties of NiO_x/CeO₂ catalysts and catalytic activity for NO reduction by CO. Catalysis Science and Technology, 2020, 10, 2359-2368.	4.1	20
93	Enhanced reactivity and stability in methane dehydro-aromatization over Mo/HZSM-5 physically mixed with NiO. Applied Catalysis B: Environmental, 2021, 296, 120377.	20.2	20
94	The effect of the preparation conditions of Pt/ZSM-5 upon its activity and selectivity for the reduction of nitric oxide. Applied Catalysis B: Environmental, 1999, 21, 183-190.	20.2	19
95	Enhanced SO2 resistance of V2O5/WO3-TiO2 catalyst physically mixed with alumina for the selective catalytic reduction of NOx with NH3. Chemical Engineering Journal, 2022, 433, 133836.	12.7	19
96	Hydrothermal conversion of alginic acid to furfural catalyzed by Cu(II) ion. Catalysis Today, 2016, 265, 154-162.	4.4	18
97	Hydrogen production by the steam reforming of ethanol over K-promoted Co/Al2O3â€“CaO xerogel catalysts. Molecular Catalysis, 2020, 491, 110980.	2.0	18
98	Synergistic effect of vanadium and zirconium oxides in the Pd-only three-way catalysts synthesized by solâ€“gel method. Applied Catalysis A: General, 2001, 207, 69-77.	4.3	17
99	Roles of Pt and BaO in the Sulfation of Pt/BaO/Al₂O₃ Lean NO_x 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
100	Effects of Sulfation Level on the Desulfation Behavior of Presulfated Pt-BaO/Al₂O₃ Lean NO_x 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
101	Hydrogen production by steam reforming of ethanol over Ni-Sr-Al 2 O 3 -ZrO 2 aerogel catalyst. Journal of Molecular Catalysis A, 2016, 424, 342-350.	4.8	16
102	Plasma assisted oxidative coupling of methane (OCM) over Ag/SiO2 and subsequent regeneration at low temperature. Applied Catalysis A: General, 2018, 557, 39-45.	4.3	16
103	Oxidative Methane Conversion to Ethane on Highly Oxidized Pd/CeO₂ Catalysts Below 400â€‰Â°C. ChemSusChem, 2020, 13, 677-681.	6.8	16
104	Promotional effect of Au on Fe/HZSM-5 catalyst for methane dehydroaromatization. Fuel, 2020, 274, 117852.	6.4	16
105	Characteristics of Mn/H-ZSM-5 catalysts for methane dehydroaromatization. Applied Catalysis A: General, 2019, 577, 10-19.	4.3	15
106	Effect of the Si/Al ratio in Ga/mesoporous HZSM-5 on the production of benzene, toluene, and xylene via coaromatization of methane and propane. Catalysis Science and Technology, 2019, 9, 6285-6296.	4.1	15
107	Uniform synthesis of palladium species confined in a small-pore zeolite via full ion-exchange investigated by cryogenic electron microscopy. Journal of Materials Chemistry A, 2021, 9, 19796-19806.	10.3	15
108	Ag-doped manganese oxide catalyst for gasoline particulate filters: Effect of crystal phase on soot oxidation activity. Applied Surface Science, 2021, 569, 151041.	6.1	15

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109	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
110	Effect of Mg/Al ratios on the NOx storage activity over Pt-BaO/Mgâ€“Al mixed oxides. Catalysis Today, 2014, 231, 155-163.	4.4	14
111	Effect of H₂O on the Morphological Changes of KNO₃ Formed on K₂O/Al₂O₃ NO_x Storage Materials: Fourier Transform Infrared and Time-Resolved X-ray Diffraction Studies. Journal of Physical Chemistry C, 2014, 118, 4189-4197.	3.1	14
112	Roles of Promoters in V₂O₅/TiO₂ Catalysts for Selective Catalytic Reduction of NOx with NH₃: Effect of Order of Impregnation. Journal of Nanoscience and Nanotechnology, 2016, 16, 4350-4356.	0.9	14
113	CeO2-TiO2 catalyst prepared by physical mixing for NH3 selective catalytic reduction: Evidence about the migration of sulfates from TiO2 to CeO2 via simple calcination. Korean Journal of Chemical Engineering, 2016, 33, 2547-2554.	2.7	14
114	Ag-(Mo-W)/ZrO2 catalysts for the production of propylene oxide: Effect of pH in the preparation of ZrO2 support. Catalysis Communications, 2018, 111, 80-83.	3.3	14
115	Rotation-Assisted Hydrothermal Synthesis of Thermally Stable Multiwalled Titanate Nanotubes and Their Application to Selective Catalytic Reduction of NO with NH₃. ACS Applied Materials & Interfaces, 2018, 10, 42249-42257.	8.0	14
116	Effect of Cu addition to carbon-supported Ru catalysts on hydrogenation of alginic acid into sugar alcohols. Applied Catalysis A: General, 2019, 578, 98-104.	4.3	14
117	Evaluation of Pd/ZSM-5 catalyst for simultaneous reaction of transesterification and partial catalytic transfer hydrogenation of soybean oil under supercritical methanol. Fuel Processing Technology, 2021, 218, 106870.	7.2	14
118	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
119	Butanol Dehydration over V2O5-TiO2/MCM-41 Catalysts Prepared via Liquid Phase Atomic Layer Deposition. Materials, 2013, 6, 1718-1729.	2.9	13
120	Direct methanol synthesis from methane in a plasma-catalyst hybrid system at low temperature using metal oxide-coated glass beads. Scientific Reports, 2018, 8, 9956.	3.3	13
121	Enhancement in the metal efficiency of Ru/TiO2 catalyst for guaiacol hydrogenation via hydrogen spillover in the liquid phase. Journal of Catalysis, 2022, 410, 93-102.	6.2	13
122	Effect of V2O5 on the catalytic activity of Pt-based diesel oxidation catalyst. Applied Catalysis B: Environmental, 2003, 45, 269-279.	20.2	12
123	Enhanced High Temperature Performance of MgAl2O4-Supported Ptâ€“BaO Lean NOx Trap Catalysts. Topics in Catalysis, 2012, 55, 70-77.	2.8	12
124	Characteristics of Manganese Supported on Hydrous Titanium Oxide Catalysts for the Selective Catalytic Reduction of NOx with Ammonia. Topics in Catalysis, 2016, 59, 1008-1012.	2.8	12
125	Catalytic hydrogenation of alginic acid into sugar alcohols over ruthenium supported on nitrogen-doped mesoporous carbons. Catalysis Today, 2020, 352, 66-72.	4.4	12
126	Pt nanoparticles encapsulated in CeO2 over-layers synthesized by controlled reductive treatment to suppress CH4 formation in high-temperature water-gas shift reaction. Journal of Catalysis, 2021, 395, 246-257.	6.2	12

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127	In situ spectroscopic studies of the effect of water on the redox cycle of Cu ions in Cu-SSZ-13 during selective catalytic reduction of NO_x. Chemical Communications, 2022, 58, 6610-6613.	4.1	12
128	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
129	Effect of sulfur loading on the desulfation chemistry of a commercial lean NOx trap catalyst. Catalysis Today, 2012, 197, 3-8.	4.4	11
130	Suppressed Strong Metalâ€“Support Interactions in Platinum on Sulfated Titania and Their Influence on the Oxidation of Carbon Monoxide. ChemCatChem, 2018, 10, 1258-1262.	3.7	11
131	Kinetic and DRIFTS studies of IrRu/Al₂O₃ catalysts for lean NO_x reduction by CO at low temperature. Catalysis Science and Technology, 2020, 10, 8182-8195.	4.1	11
132	Control of the Cu ion species in Cu-SSZ-13 via the introduction of Co²⁺ co-cations to improve the NH₃-SCR activity. Catalysis Science and Technology, 2021, 11, 4838-4848.	4.1	11
133	Alleviating inhibitory effect of H2 on low-temperature water-gas shift reaction activity of Pt/CeO2 catalyst by forming CeO2 nano-patches on Pt nano-particles. Applied Catalysis B: Environmental, 2022, 305, 121038.	20.2	11
134	Sequential high temperature reduction, low temperature hydrolysis for the regeneration of sulfated NOx trap catalysts. Catalysis Today, 2008, 136, 183-187.	4.4	10
135	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
136	Oxychlorination of methane over FeOx/CeO2 catalysts. Korean Journal of Chemical Engineering, 2018, 35, 2185-2190.	2.7	10
137	NO reduction by CO over CoOx/CeO2 catalysts: Effect of support calcination temperature on activity. Molecular Catalysis, 2020, 482, 110703.	2.0	10
138	System-Level Analysis of Methanol Production from Shale Gas Integrated with Multibed-BTX Production. ACS Sustainable Chemistry and Engineering, 2022, 10, 5998-6011.	6.7	10
139	System-level analysis for continuous BTX production from shale gas over Mo/HZSM-5 catalyst: Promotion effects of CO2 co-feeding on process economics and environment. Chemical Engineering Journal, 2022, 450, 137992.	12.7	10
140	Removal of NOx at Low Temperature Over Mesoporous Î±-Mn₂O₃ Catalyst. Journal of Nanoscience and Nanotechnology, 2014, 14, 2527-2531.	0.9	9
141	Catalytic Conversion of Macroalgae-derived Alginate to Useful Chemicals. Catalysis Surveys From Asia, 2016, 20, 195-209.	2.6	9
142	Catalytic Hydrogenation of Macroalgaeâ€Derived Alginic Acid into Sugar Alcohols. ChemSusChem, 2017, 10, 4891-4898.	6.8	9
143	Hydrothermal Conversion of Alginate into Uronic Acids over a Sulfonated Glucoseâ€Derived Carbon Catalyst. ChemCatChem, 2017, 9, 329-337.	3.7	9
144	Selective catalytic reduction of NO by ammonia and NO oxidation Over CoOx/CeO2 catalysts. Molecular Catalysis, 2020, 482, 110664.	2.0	9

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145	Tailoring the mechanochemical interaction between vanadium oxides and zeolite for sulfur-resistant DeNO catalysts. Applied Catalysis B: Environmental, 2022, 316, 121672.	20.2	9
146	Improving the efficiency of Ru metal supported on SiO2 in liquid-phase hydrogenation of gluconic acid by adding activated carbon. Chemical Engineering Journal, 2022, 450, 138149.	12.7	9
147	Aromatization of pentane catalyzed over various metallosilicates. Korean Journal of Chemical Engineering, 1997, 14, 249-256.	2.7	8
148	Comparison of Two Preparation Methods in the Redox Properties of Pd/CeO2/Ta/Si Model Catalysts: Spin Coating Versus Sputter Deposition. Catalysis Letters, 2004, 98, 23-28.	2.6	8
149	Promotional Effect on Selective Catalytic Reduction of NO_xwith NH₃over Overloaded W and Ce on V₂O₅/TiO₂Catalysts. Journal of Nanomaterials, 2015, 2015, 1-7.	2.7	8
150	Preparation of HZSM-5 catalysts with different ratios of structure directing agents and their effects on the decomposition of exo-tetrahydrodicyclopentadiene under supercritical conditions and coke formation. Applied Surface Science, 2020, 511, 145398.	6.1	8
151	Promoting the Methane Oxidation on Pd/CeO₂ Catalyst by Increasing the Surface Oxygen Mobility via Defect Engineering. ChemCatChem, 2021, 13, 3706-3712.	3.7	8
152	Synthesis of faulted CHA-type zeolites with controllable faulting probability. Microporous and Mesoporous Materials, 2018, 256, 266-274.	4.4	8
153	Top-down HCl treatment to prepare highly active Ga species in Ga/ZSM-5 for propane aromatization. Fuel Processing Technology, 2022, 227, 107107.	7.2	8
154	Octene hydroformylation by using rhodium complexes tethered onto selectively functionalized mesoporous silica and in situ high pressure IR study. Catalysis Today, 2011, 164, 561-565.	4.4	7
155	Preparation of Highly Dispersed Tungsten Oxide on MCM-41 via Atomic Layer Deposition and Its Application to Butanol Dehydration. Journal of Nanoscience and Nanotechnology, 2012, 12, 6074-6079.	0.9	7
156	Complementary effect of plasmaâ€“catalysis hybrid system on methane complete oxidation over non-PGM catalysts. Catalysis Communications, 2015, 69, 223-227.	3.3	7
157	Catalytic Cleavage of Ether Bond in a Lignin Model Compound over Carbon-Supported Noble Metal Catalysts in Supercritical Ethanol. Catalysts, 2019, 9, 158.	3.5	7
158	Enhanced activity of vanadia supported on microporous titania for the selective catalytic reduction of NO with NH3: Effect of promoters. Chemosphere, 2021, 275, 130105.	8.2	7
159	Methane combustion over mesoporous cobalt oxide catalysts: Effects of acid treatment. Molecular Catalysis, 2021, 511, 111728.	2.0	7
160	Highly selective production of syngas (>99%) in the partial oxidation of methane at 480ÂÂ°C over Pd/CeO2 catalyst promoted by HCl. Applied Surface Science, 2021, 560, 150043.	6.1	6
161	Deactivation resistance effect of alkane co-feeding on methane dehydroaromatization and active GaO+ species in Ga/HZSM-5 for BTX production. Fuel, 2022, 325, 124939.	6.4	6
162	Sulfation and Desulfation Mechanisms on Ptâ€“BaO/Al2O3 NOx Storage-Reduction (NSR) Catalysts. Catalysis Surveys From Asia, 2014, 18, 13-23.	2.6	5

#	Article	IF	Citations
163	Propylene epoxidation by oxygen over tungsten oxide supported on ceria-zirconia. Molecular Catalysis, 2019, 467, 111-119.	2.0	5
164	Effects of Co/Al molar ratio in CoAPSO-34 catalysts on the physicochemical property and catalytic performance in the chloromethane to light olefins reaction. Applied Catalysis A: General, 2020, 603, 117762.	4.3	5
165	Synthesis of aluminum and gallium-incorporated MFI zeotypes and their catalytic activity for ethane dehydroaromatization. Microporous and Mesoporous Materials, 2021, 323, 111243.	4.4	5
166	Coaromatization of methane and propane over Ga supported on HZSM-5 catalysts: The effect of mesoporosity on deactivation behavior. Fuel, 2021, 304, 121497.	6.4	5
167	In-situ IR studies of surface species during the selective catalytic reduction (SCR) of NO by propene over Cu-ZSM-5 zeolites. Studies in Surface Science and Catalysis, 1997, 105, 1557-1563.	1.5	4
168	Utilization of a By-Product Produced from Oxidative Desulfurization Process Over Cs-Mesoporous Silica Catalysts. Journal of Nanoscience and Nanotechnology, 2011, 11, 1706-1709.	0.9	4
169	Effect of reductive treatments on Pt behavior and NOx storage in lean NOx trap catalysts. Catalysis Today, 2011, 175, 78-82.	4.4	4
170	Hydrothermal Synthesis of Titanate Nanotubes with Different Pore Structure and its Effect on the Catalytic Performance of V2O5-WO3/Titanate Nanotube Catalysts for NH3-SCR. Topics in Catalysis, 2019, 62, 214-218.	2.8	4
171	Promotional Effect of CO2 on Desulfation Processes for Pre-Sulfated Pt-BaO/Al2O3 Lean NOx Trap Catalysts. Topics in Catalysis, 2009, 52, 1719-1722.	2.8	3
172	Catalytic Characteristics of Titanium Oxide/MCM-41 Synthesized by Liquid Phase Atomic Layer Deposition. Journal of Nanoscience and Nanotechnology, 2013, 13, 1988-1992.	0.9	3
173	Synthesis of Dimethyl Carbonate from Propylene Carbonate and Methanol Over Y₂O₃/CeO₂â€“La₂O<SUB>3&... Catalysts. Journal of Nanoscience and Nanotechnology, 2016, 16, 10810-10815.		
174	Effect of Soot on N2O Formation Over Pt Based Diesel Oxidation Catalyst Supported on Microporous TiO2. Topics in Catalysis, 2017, 60, 361-366.	2.8	2
175	Decomposition of Lignin Using MOâ€“MgAlOy Mixed Oxide Catalysts (M=Co, Ni and Cu) in Supercritical Ethanol. Topics in Catalysis, 2017, 60, 637-643.	2.8	2
176	Benzene, Toluene, and Xylene Production by Direct Dehydroaromatization of Methane Over WOy/HZSM-5 Catalysts. Journal of Nanoscience and Nanotechnology, 2017, 17, 8226-8231.	0.9	2
177	Aggregation of CeO₂ particles with aligned grains drives sintering of Pt single atoms in Pt/CeO₂ catalysts. Journal of Materials Chemistry A, 2022, 10, 7029-7035.	10.3	2
178	Sulfation and Desulfation Behavior of Ptâ€“BaO/MgOâ€“Al₂O₃ NOx Storage Reduction Catalyst. Journal of Nanoscience and Nanotechnology, 2016, 16, 4411-4416.	0.9	1
179	Hydrogenolysis of alginic acid over mono and bimetallic ruthenium/nickel supported on activated carbon catalysts with basic promoters. Reaction Chemistry and Engineering, 2020, 5, 1783-1790.	3.7	1
180	Effects of Ce/Al molar ratio in Ce-incorporated mesoporous SAPO-34 on the physicochemical property and catalytic performance in the selective production of light olefins via conversion of chloromethane. Applied Catalysis A: General, 2021, 615, 118061.	4.3	1

#	Article	IF	Citations
181	Lignin Depolymerization Over CuOâ€“MgOâ€“Al₂O₃ Mixed Oxide Catalysts in Supercritical Ethanol: Effect of Catalyst Preparation Methods. Nanoscience and Nanotechnology Letters, 2017, 9, 161-164.	0.4	1
182	NOx Reduction by CO over Ir-based Bimetallic Catalysts. Transactions of the Korean Society of Automotive Engineers, 2020, 28, 359-365.	0.3	1
183	Controlling Multiple Active Sites on Pdâ^'CeO 2 for Sequential Câ^'C Crossâ€coupling and Alcohol Oxidation in One Reaction System. ChemCatChem, 0, , .	3.7	1
184	2â€Butanol Dehydration over Highly Dispersed Molybdenum Oxide/<scp>MCM</scp>â€41 Catalysts. Bulletin of the Korean Chemical Society, 2015, 36, 1974-1979.	1.9	0
185	Effect of Reactant Ratios on Methane Oxychlorination Over CeO₂ Catalyst. Journal of Nanoscience and Nanotechnology, 2019, 19, 5961-5964.	0.9	0