Ken-ichi Shimizu

List of Publications by Year
in descending order

344 papers	16,699 citations	11639 70 h-index	26591 107 g-index
388 all docs	388 docs citations	388 times ranked	13933 citing authors

#	Article	IF	Citations
1	Enhanced production of hydroxymethylfurfural from fructose with solid acid catalysts by simple water removal methods. Catalysis Communications, 2009, 10, 1849-1853.	1.6	318
2	Machine Learning for Catalysis Informatics: Recent Applications and Prospects. ACS Catalysis, 2020, 10, 2260-2297.	5.5	309
3	Comprehensive IR study on acid/base properties of metal oxides. Applied Catalysis A: General, 2012, 433-434, 135-145.	2.2	292
4	Effects of BrÃ¸nsted and Lewis acidities on activity and selectivity of heteropolyacid-based catalysts for hydrolysis of cellobiose and cellulose. Green Chemistry, 2009, 11, 1627.	4.6	288
5	Silver-alumina catalysts for selective reduction of NO by higher hydrocarbons: structure of active sites and reaction mechanism. Applied Catalysis B: Environmental, 2001, 30, 151-162.	10.8	287
6	Heterogeneous catalysis for the direct synthesis of chemicals by borrowing hydrogen methodology. Catalysis Science and Technology, 2015, 5, 1412-1427.	2.1	220
7	Oxidantâ€Free Dehydrogenation of Alcohols Heterogeneously Catalyzed by Cooperation of Silver Clusters and Acidâ€“Base Sites on Alumina. Chemistry - A European Journal, 2009, 15, 2341-2351.	1.7	218
8	Chemoselective Hydrogenation of Nitroaromatics by Supported Gold Catalysts: Mechanistic Reasons of Size- and Support-Dependent Activity and Selectivity. Journal of Physical Chemistry C, 2009, 113, 17803-17810.	1.5	202
9	Size- and support-dependent silver cluster catalysis for chemoselective hydrogenation of nitroaromatics. Journal of Catalysis, 2010, 270, 86-94.	3.1	200
10	Promotion effect of H2 on the low temperature activity of the selective reduction of NO by light hydrocarbons over Ag/Al2O3. Applied Catalysis B: Environmental, 2003, 42, 179-186.	10.8	193
11	Structural investigations of functionalized mesoporous silica-supported palladium catalyst for Heck and Suzuki coupling reactions. Journal of Catalysis, 2004, 228, 141-151.	3.1	192
12	Direct Dehydrogenative Amide Synthesis from Alcohols and Amines Catalyzed by Î³â€Alumina Supported Silver Cluster. Chemistry - A European Journal, 2009, 15, 9977-9980.	1.7	190
13	Catalytic performance of Agâ€“Al2O3 catalyst for the selective catalytic reduction of NO by higher hydrocarbons. Applied Catalysis B: Environmental, 2000, 25, 239-247.	10.8	189
14	Heterogeneous Ni Catalyst for Direct Synthesis of Primary Amines from Alcohols and Ammonia. ACS Catalysis, 2013, 3, 112-117.	5.5	185
15	Heterogeneous Ni Catalysts for N-Alkylation of Amines with Alcohols. ACS Catalysis, 2013, 3, 998-1005.	5.5	179
16	Single-atom Pt in intermetallics as an ultrastable and selective catalyst for propane dehydrogenation. Nature Communications, 2020, 11, 2838.	5.8	169
17	Direct Cï£¿C Crossâ€Coupling of Secondary and Primary Alcohols Catalyzed by a Î³â€Aluminaâ€Supported Silver Subnanocluster. Angewandte Chemie - International Edition, 2009, 48, 3982-3986.	7.2	163
18	Design of Interfacial Sites between Cu and Amorphous ZrO₂ Dedicated to CO₂-to-Methanol Hydrogenation. ACS Catalysis, 2018, 8, 7809-7819.	5.5	159

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19	Structure of active Ag clusters in Ag zeolites for SCR of NO by propane in the presence of hydrogen. Journal of Catalysis, 2004, 227, 367-374.	3.1	158
20	Hydrogenation of levulinic acid to Î³-valerolactone by Ni and MoO_x co-loaded carbon catalysts. Green Chemistry, 2014, 16, 3899-3903.	4.6	154
21	Selective catalytic reduction of NO over supported silver catalystsâ€”practical and mechanistic aspects. Physical Chemistry Chemical Physics, 2006, 8, 2677-2695.	1.3	151
22	Transamidation of amides with amines under solvent-free conditions using a CeO2 catalyst. Green Chemistry, 2012, 14, 717.	4.6	147
23	Study of active sites and mechanism for soot oxidation by silver-loaded ceria catalyst. Applied Catalysis B: Environmental, 2010, 96, 169-175.	10.8	146
24	Selective catalytic reduction of NO by hydrocarbons on Ga2O3/Al2O3 catalysts. Applied Catalysis B: Environmental, 1998, 16, 319-326.	10.8	143
25	Heterogeneous Pt Catalysts for Reductive Amination of Levulinic Acid to Pyrrolidones. ACS Catalysis, 2014, 4, 3045-3050.	5.5	142
26	Role of Acetate and Nitrates in the Selective Catalytic Reduction of NO by Propene over Alumina Catalyst as Investigated by FTIR. Journal of Physical Chemistry B, 1999, 103, 5240-5245.	1.2	141
27	Toward Effective Utilization of Methane: Machine Learning Prediction of Adsorption Energies on Metal Alloys. Journal of Physical Chemistry C, 2018, 122, 8315-8326.	1.5	140
28	Toward a rational control of solid acid catalysis for green synthesis and biomass conversion. Energy and Environmental Science, 2011, 4, 3140.	15.6	134
29	Î³â€Aluminaâ€Supported Silver Cluster for <i>N</i>â€Benzylation of Anilines with Alcohols. ChemCatChem, 2009, 1, 497-503.	1.8	132
30	Promotion effect of hydrogen on surface steps in SCR of NO by propane over alumina-based silver catalyst as examined by transient FT-IR. Physical Chemistry Chemical Physics, 2003, 5, 2154.	1.3	129
31	Deconvolution Analysis of Ga K-Edge XANES for Quantification of Gallium Coordinations in Oxide Environments. Journal of Physical Chemistry B, 1998, 102, 10190-10195.	1.2	128
32	Size- and support-dependent Pt nanocluster catalysis for oxidant-free dehydrogenation of alcohols. Journal of Catalysis, 2013, 304, 63-71.	3.1	125
33	Photocatalytic Water Splitting on Ni-Intercalated Ruddlesdenâˆ’Popper Tantalate H2La2/3Ta2O7. Chemistry of Materials, 2005, 17, 5161-5166.	3.2	123
34	Selective oxidation of liquid hydrocarbons over photoirradiated TiO2 pillared clays. Applied Catalysis A: General, 2002, 225, 185-191.	2.2	121
35	Selective hydrogenation of levulinic acid to valeric acid and valeric biofuels by a Pt/HMFI catalyst. Catalysis Science and Technology, 2014, 4, 3227-3234.	2.1	115
36	Acceptorless dehydrogenative coupling reactions with alcohols over heterogeneous catalysts. Green Chemistry, 2018, 20, 2933-2952.	4.6	114

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37	Machine-learning prediction of the d-band center for metals and bimetals. RSC Advances, 2016, 6, 52587-52595.	1.7	113
38	Efficient and Substrateâ€Specific Hydration of Nitriles to Amides in Water by Using a CeO₂ Catalyst. Chemistry - A European Journal, 2011, 17, 11428-11431.	1.7	112
39	Hydrodeoxygenation of fatty acids and triglycerides by Pt-loaded Nb₂O₅ catalysts. Catalysis Science and Technology, 2014, 4, 3705-3712.	2.1	109
40	Intermediates in the Selective Reduction of NO by Propene over Cuâˆ'Al2O3 Catalysts:â€‰ Transient inâˆ'Situ FTIR Study. Journal of Physical Chemistry B, 2000, 104, 2885-2893.	1.2	106
41	A Cuâ€"Pd single-atom alloy catalyst for highly efficient NO reduction. Chemical Science, 2019, 10, 8292-8298.	3.7	105
42	Photocatalytic water splitting on hydrated layered perovskite tantalate A2SrTa2O7Â·nH2O (Aâ€‰=â€‰H, K, and) Tj ETQq0 0 0 rgBT /C	1.3	104
43	Reductive Activation of O2with H2-Reduced Silver Clusters as a Key Step in the H2-Promoted Selective Catalytic Reduction of NO with C3H8over Ag/Al2O3. Journal of Physical Chemistry C, 2007, 111, 950-959.	1.5	104
44	Activity controlling factors for low-temperature oxidation of CO over supported Pd catalysts. Applied Catalysis B: Environmental, 2013, 132-133, 511-518.	10.8	104
45	Acceptor-free dehydrogenation of secondary alcohols by heterogeneous cooperative catalysis between Ni nanoparticles and acidâ€"base sites of alumina supports. Journal of Catalysis, 2013, 300, 242-250.	3.1	104
46	Density Functional Theory Calculations of Oxygen Vacancy Formation and Subsequent Molecular Adsorption on Oxide Surfaces. Journal of Physical Chemistry C, 2018, 122, 29435-29444.	1.5	103
47	Factors Controlling Activity and Selectivity for SCR of NO by Hydrogen over Supported Platinum Catalysts. Journal of Physical Chemistry B, 2004, 108, 18327-18335.	1.2	96
48	Stepwise production of CO-rich syngas and hydrogen via solar methane reforming by using a Ni(II)â€"ferrite redox system. Solar Energy, 2002, 73, 363-374.	2.9	94
49	Alumina-Supported Gallium Oxide Catalysts for NO Selective Reduction:â€‰ Influence of the Local Structure of Surface Gallium Oxide Species on the Catalytic Activity. Journal of Physical Chemistry B, 1999, 103, 1542-1549.	1.2	92
50	Acidic properties of sulfonic acid-functionalized FSM-16 mesoporous silica and its catalytic efficiency for acetalization of carbonyl compounds. Journal of Catalysis, 2005, 231, 131-138.	3.1	92
51	Unique catalytic features of Ag nanoclusters for selective NOx reduction and green chemical reactions. Catalysis Science and Technology, 2011, 1, 331.	2.1	92
52	Bulk tungsten-substituted vanadium oxide for low-temperature NOx removal in the presence of water. Nature Communications, 2021, 12, 557.	5.8	92
53	Ligand field effect on the chemical shift in XANES spectra of Cu(II) compounds. Physical Chemistry Chemical Physics, 2001, 3, 862-866.	1.3	88
54	Isolated Indium Hydrides in CHA Zeolites: Speciation and Catalysis for Nonoxidative Dehydrogenation of Ethane. Journal of the American Chemical Society, 2020, 142, 4820-4832.	6.6	86

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55	<i>C</i>-Methylation of Alcohols, Ketones, and Indoles with Methanol Using Heterogeneous Platinum Catalysts. ACS Catalysis, 2018, 8, 3091-3103.	5.5	85
56	In situ FT/IR study of selective catalytic reduction of NO over alumina-based catalysts. Progress in Energy and Combustion Science, 2003, 29, 71-84.	15.8	83
57	Bulk Vanadium Oxide versus Conventional V₂O₅/TiO₂: NH₃â€"SCR Catalysts Working at a Low Temperature Below 150 Â°C. ACS Catalysis, 2019, 9, 9327-9331.	5.5	82
58	Low-Temperature Hydrogenation of CO₂ to Methanol over Heterogeneous TiO₂-Supported Re Catalysts. ACS Catalysis, 2019, 9, 3685-3693.	5.5	82
59	Transition metal-aluminate catalysts for NO reduction by C3H6. Applied Catalysis B: Environmental, 1998, 18, 163-170.	10.8	81
60	Pdâ€"sepiolite catalyst for Suzuki coupling reaction in water: Structural and catalytic investigations. Journal of Catalysis, 2004, 227, 202-209.	3.1	80
61	SO3H-functionalized silica for acetalization of carbonyl compounds with methanol and tetrahydropyranylation of alcohols. Tetrahedron Letters, 2004, 45, 5135-5138.	0.7	80
62	Characterization and Activity Analysis of Catalytic Water Oxidation Induced by Hybridization of [(OH2)(terpy)Mn(Î¼-O)2Mn(terpy)(OH2)]3+and Clay Compounds. Journal of Physical Chemistry B, 2006, 110, 23107-23114.	1.2	80
63	Selective Exchange and Fixation of Strontium Ions with Ultrafine Na-4-mica. Langmuir, 2001, 17, 4881-4886.	1.6	79
64	Heterogeneous cobalt catalysts for the acceptorless dehydrogenation of alcohols. Green Chemistry, 2013, 15, 418-424.	4.6	78
65	Selective Synthesis of Primary Amines by Reductive Amination of Ketones with Ammonia over Supported Pt catalysts. ChemCatChem, 2015, 7, 921-924.	1.8	77
66	Rheniumâ€Loaded TiO₂: A Highly Versatile and Chemoselective Catalyst for the Hydrogenation of Carboxylic Acid Derivatives and the Nâ€Methylation of Amines Using H₂ and CO₂. Chemistry - A European Journal, 2017, 23, 14848-14859.	1.7	76
67	Ternary platinumâ€"cobaltâ€"indium nanoalloy on ceria as a highly efficient catalyst for the oxidative dehydrogenation of propane using CO2. Nature Catalysis, 2022, 5, 55-65.	16.1	76
68	Fluidized Bed Coal Gasification with CO2under Direct Irradiation with Concentrated Visible Light. Energy & Fuels, 2002, 16, 1264-1270.	2.5	74
69	CeO2-catalyzed nitrile hydration to amide: reaction mechanism and active sites. Catalysis Science and Technology, 2013, 3, 1386.	2.1	73
70	Spectroscopic characterisation of Cuâ€"Al2O3 catalysts for selective catalytic reduction of NO with propene. Physical Chemistry Chemical Physics, 2000, 2, 2435-2439.	1.3	72
71	Doped-vanadium oxides as sensing materials for high temperature operative selective ammonia gas sensors. Sensors and Actuators B: Chemical, 2009, 141, 410-416.	4.0	71
72	Characterization of Lewis acidity of cation-exchanged montmorillonite K-10 clay as effective heterogeneous catalyst for acetylation of alcohol. Journal of Molecular Catalysis A, 2008, 284, 89-96.	4.8	70

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73	Volcano-Curves for Dehydrogenation of 2-Propanol and Hydrogenation of Nitrobenzene by SiO₂-Supported Metal Nanoparticles Catalysts As Described in Terms of a d-Band Model. ACS Catalysis, 2012, 2, 1904-1909.	5.5	70
74	Sustainable Heterogeneous Platinum Catalyst for Direct Methylation of Secondary Amines by Carbon Dioxide and Hydrogen. Chemistry - A European Journal, 2014, 20, 6264-6267.	1.7	70
75	Direct synthesis of quinazolinones by acceptorless dehydrogenative coupling of o-aminobenzamide and alcohols by heterogeneous Pt catalysts. Catalysis Science and Technology, 2014, 4, 1716-1719.	2.1	70
76	Hydrogen assisted urea-SCR and NH3-SCR with silverâ€“alumina as highly active and SO2-tolerant de-NO catalysis. Applied Catalysis B: Environmental, 2007, 77, 202-205.	10.8	68
77	Mechanistic causes of the hydrocarbon effect on the activity of Agâ€“Al2O3 catalyst for the selective reduction of NO. Physical Chemistry Chemical Physics, 2001, 3, 880-884.	1.3	67
78	Formation and Reactions of NH₄NO₃ during Transient and Steady-State NH₃-SCR of NO_{<i>x</i>} over H-AFX Zeolites: Spectroscopic and Theoretical Studies. ACS Catalysis, 2020, 10, 2334-2344.	5.5	67
79	Mechanism of NO Reduction by CH4 in the Presence of O2 over Pdâ€“Hâ€“Mordenite. Journal of Catalysis, 2000, 195, 151-160.	3.1	66
80	Quantification of aluminium coordinations in alumina and silicaâ€“alumina by Al K-edge XANES. Physical Chemistry Chemical Physics, 2001, 3, 1925-1929.	1.3	66
81	Heterogeneous Pt and MoO_{<i>x</i>} Co-Loaded TiO₂ Catalysts for Low-Temperature CO₂ Hydrogenation To Form CH₃OH. ACS Catalysis, 2019, 9, 8187-8196.	5.5	66
82	<i>In Situ</i> Spectroscopic Studies on the Redox Cycle of NH₃â^'SCR over Cuâ^'CHA Zeolites. ChemCatChem, 2020, 12, 3050-3059.	1.8	64
83	Kinetic and in situ infrared studies on SCR of NO with propane by silverâ€“alumina catalyst: Role of H2 on O2 activation and retardation of nitrate poisoning. Journal of Catalysis, 2006, 239, 402-409.	3.1	62
84	Suzuki cross-coupling reaction catalyzed by palladium-supported sepiolite. Tetrahedron Letters, 2002, 43, 5653-5655.	0.7	61
85	Oxidation of CO over Ru/Ceria prepared by self-dispersion of Ru metal powder into nano-sized particle. Catalysis Today, 2013, 201, 62-67.	2.2	61
86	N-alkylation of ammonia and amines with alcohols catalyzed by Ni-loaded CaSiO3. Catalysis Today, 2014, 232, 134-138.	2.2	61
87	Silver cluster-promoted heterogeneous copper catalyst for N-alkylation of amines with alcohols. RSC Advances, 2011, 1, 1310.	1.7	60
88	Acceptorless Dehydrogenative Synthesis of Pyrimidines from Alcohols and Amidines Catalyzed by Supported Platinum Nanoparticles. ACS Catalysis, 2018, 8, 11330-11341.	5.5	58
89	Formation and Redispersion of Silver Clusters in Ag-MFI Zeolite as Investigated by Time-Resolved QXAFS and UVâ^'Vis. Journal of Physical Chemistry C, 2007, 111, 1683-1688.	1.5	57
90	Surface Oxygen Atom as a Cooperative Ligand in Pd Nanoparticle Catalysis for Selective Hydration of Nitriles to Amides in Water: Experimental and Theoretical Studies. ACS Catalysis, 2012, 2, 2467-2474.	5.5	56

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91	Acceptorless dehydrogenative synthesis of benzothiazoles and benzimidazoles from alcohols or aldehydes by heterogeneous Pt catalysts under neutral conditions. Tetrahedron Letters, 2015, 56, 4885-4888.	0.7	56
92	Seasonal change of persistent organic pollutant concentrations in air at Niigata area, Japan. Chemosphere, 2003, 52, 683-694.	4.2	55
93	Polyvalent-metal salts of heteropolyacid as catalyst for Friedel-Crafts alkylation reactions. Applied Catalysis A: General, 2008, 349, 1-5.	2.2	55
94	Carbon oxidation with Ag/ceria prepared by self-dispersion of Ag powder into nano-particles. Catalysis Today, 2011, 175, 93-99.	2.2	55
95	Surface Oxygenâ€Assisted Pd Nanoparticle Catalysis for Selective Oxidation of Silanes to Silanols. Chemistry - A European Journal, 2012, 18, 2226-2229.	1.7	54
96	Statistical Analysis and Discovery of Heterogeneous Catalysts Based on Machine Learning from Diverse Published Data. ChemCatChem, 2019, 11, 4537-4547.	1.8	54
97	Hydrodeoxygenation of Fatty Acids, Triglycerides, and Ketones to Liquid Alkanes by a Ptâ€“MoO_{<i>x</i>}/TiO₂ Catalyst. ChemCatChem, 2017, 9, 2822-2827.	1.8	53
98	Lewis Acid Catalysis of Nb₂O₅ for Reactions of Carboxylic Acid Derivatives in the Presence of Basic Inhibitors. ChemCatChem, 2019, 11, 383-396.	1.8	53
99	Catalytically Activated Metal Foam Absorber for Light-to-Chemical Energy Conversion via Solar Reforming of Methane. Energy & Fuels, 2003, 17, 13-17.	2.5	52
100	General and Selective Câ€3 Alkylation of Indoles with Primary Alcohols by a Reusable Pt Nanocluster Catalyst. Chemistry - A European Journal, 2013, 19, 14416-14419.	1.7	52
101	Polyvalent-metal salts of heteropolyacid as efficient heterogeneous catalysts for Friedelâ€“Crafts acylation of arenes with carboxylic acids. Catalysis Communications, 2008, 9, 980-983.	1.6	51
102	Self-aldol condensation of unmodified aldehydes catalysed by secondary-amine immobilised in FSM-16 silica. Tetrahedron Letters, 2002, 43, 9073-9075.	0.7	49
103	Influence of hydrocarbon structure on selective catalytic reduction of NO by hydrocarbons over Cu-Al2O3. Applied Catalysis B: Environmental, 2002, 37, 197-204.	10.8	48
104	Impedancemetric gas sensor based on Pt and WO3 co-loaded TiO2 and ZrO2 as total NOx sensing materials. Sensors and Actuators B: Chemical, 2008, 130, 707-712.	4.0	48
105	Alkylation of 2-methylquinoline with alcohols under additive-free conditions by Al2O3-supported Pt catalyst. Tetrahedron Letters, 2013, 54, 6490-6493.	0.7	48
106	N-Methylation of amines and nitroarenes with methanol using heterogeneous platinum catalysts. Journal of Catalysis, 2019, 371, 47-56.	3.1	48
107	Effects of hydrogen and oxygenated hydrocarbons on the activity and SO2-tolerance of Ag/Al2O3 for selective reduction of NO. Applied Catalysis B: Environmental, 2007, 71, 80-84.	10.8	46
108	CeO2-catalysed one-pot selective synthesis of esters from nitriles and alcohols. Green Chemistry, 2012, 14, 984.	4.6	46

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109	C-3 alkylation of oxindole with alcohols by Pt/CeO₂ catalyst in additive-free conditions. Catalysis Science and Technology, 2014, 4, 1064-1069.	2.1	46
110	Promotional Effect of La in the Three-Way Catalysis of La-Loaded Al₂O₃-Supported Pd Catalysts (Pd/La/Al₂O₃). ACS Catalysis, 2020, 10, 1010-1023.	5.5	46
111	Active, Selective, and Durable Catalyst for Alkane Dehydrogenation Based on a Well-Designed Trimetallic Alloy. ACS Catalysis, 2020, 10, 5163-5172.	5.5	46
112	Doubly Decorated Platinumâ€“Gallium Intermetallics as Stable Catalysts for Propane Dehydrogenation. Angewandte Chemie - International Edition, 2021, 60, 19715-19719.	7.2	46
113	Stepwise production of CO-rich syngas and hydrogen via methane reforming by a WO3-redox catalyst. Energy, 2003, 28, 1055-1068.	4.5	45
114	Selective photo-oxidation of benzene over transition metal-exchanged BEA zeolite. Applied Catalysis A: General, 2004, 269, 75-80.	2.2	45
115	Mechanism of Low-Temperature CO Oxidation on Pt/Fe-Containing Alumina Catalysts Pretreated with Water. Journal of Physical Chemistry C, 2013, 117, 1268-1277.	1.5	45
116	TiO₂â€Supported Re as a General and Chemoselective Heterogeneous Catalyst for Hydrogenation of Carboxylic Acids to Alcohols. Chemistry - A European Journal, 2017, 23, 1001-1006.	1.7	45
117	CeO2-catalyzed Transformations of Nitriles and Amides. Chemistry Letters, 2012, 41, 1397-1405.	0.7	43
118	Oxygen reduction reaction over silver particles with various morphologies and surface chemical states. Journal of Power Sources, 2014, 245, 998-1004.	4.0	43
119	Amidation of Carboxylic Acids with Amines by Nb₂O₅ as a Reusable Lewis Acid Catalyst. ChemCatChem, 2015, 7, 3555-3561.	1.8	43
120	Substrate-Specific Heterogeneous Catalysis of CeO₂ by Entropic Effects via Multiple Interactions. ACS Catalysis, 2015, 5, 20-26.	5.5	43
121	Catalyst effectiveness factor of cobalt-exchanged mordenites for the selective catalytic reduction of NO with hydrocarbons. Applied Catalysis B: Environmental, 1998, 17, 107-113.	10.8	42
122	The average Pd oxidation state in Pd/SiO2 quantified by L3-edge XANES analysis and its effects on catalytic activity for CO oxidation. Catalysis Science and Technology, 2012, 2, 767.	2.1	42
123	Lewis Acid-Promoted Heterogeneous Platinum Catalysts for Hydrogenation of Amides to Amines. ChemistrySelect, 2016, 1, 736-740.	0.7	42
124	Sintering-resistant and self-regenerative properties of Ag/SnO2 catalyst for soot oxidation. Applied Catalysis B: Environmental, 2011, 108-109, 39-46.	10.8	41
125	Transfer hydrogenation of ketones by ceria-supported Ni catalysts. Green Chemistry, 2012, 14, 2983.	4.6	41
126	Design of Pd-based pseudo-binary alloy catalysts for highly active and selective NO reduction. Chemical Science, 2019, 10, 4148-4162.	3.7	41

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127	Redox tunable reversible molecular sieves: orthorhombic molybdenum vanadium oxide. Chemical Communications, 2011, 47, 10812.	2.2	40
128	Fe3+-exchanged clay catalyzed transamidation of amides with amines under solvent-free condition. Tetrahedron Letters, 2014, 55, 1316-1319.	0.7	40
129	A Heterogeneous Niobium(V) Oxide Catalyst for the Direct Amidation of Esters. ChemCatChem, 2015, 7, 2705-2710.	1.8	40
130	Selective N-alkylation of indoles with primary alcohols using a Pt/HBEA catalyst. Green Chemistry, 2015, 17, 173-177.	4.6	40
131	Thermochemical methane reforming using WO3 as an oxidant below 1173 K by a solar furnace simulator. Solar Energy, 2001, 71, 315-324.	2.9	39
132	Hydrodeoxygenation of sulfoxides to sulfides by a Pt and MoO_x co-loaded TiO₂ catalyst. Green Chemistry, 2016, 18, 2554-2560.	4.6	39
133	Acceptorless dehydrogenation of N -heterocycles by supported Pt catalysts. Catalysis Today, 2017, 281, 507-511.	2.2	38
134	Reaction Mechanism of H2-Promoted Selective Catalytic Reduction of NO with C3H8over Agâ^’MFI Zeolite. Journal of Physical Chemistry C, 2007, 111, 6481-6487.	1.5	37
135	Reaction Mechanism of H2-Promoted Selective Catalytic Reduction of NO with NH3over Ag/Al2O3. Journal of Physical Chemistry C, 2007, 111, 2259-2264.	1.5	37
136	Artificial model of photosynthetic oxygen evolving complex: Catalytic O2 production from water by di-Î¼-oxo manganese dimers supported by clay compounds. Biochimica Et Biophysica Acta - Bioenergetics, 2007, 1767, 660-665.	0.5	37
137	Promotion effect of hydrogen on lean NOx reduction by hydrocarbons over Ag/Al2O3 catalyst. Chemical Engineering Science, 2007, 62, 5335-5337.	1.9	37
138	Solution Synthesis of <i>N</i>,<i>N</i>â€Dimethylformamideâ€Stabilized Ironâ€Oxide Nanoparticles as an Efficient and Recyclable Catalyst for Alkene Hydrosilylation. ChemCatChem, 2018, 10, 2378-2382.	1.8	37
139	Fe3+-exchanged fluorotetrasilicic mica as an active and reusable catalyst for Michael reaction. Tetrahedron Letters, 2003, 44, 7421-7424.	0.7	36
140	Effect of hydrogen addition on SO2 tolerance of silverâ€“alumina for SCR of NO with propane. Journal of Catalysis, 2006, 239, 117-124.	3.1	36
141	Depletion of CO oxidation activity of supported Au catalysts prepared from thiol-capped Au nanoparticles by sulfates formed at Auâ€“titania boundaries: Effects of heat treatment conditions on catalytic activity. Journal of Catalysis, 2010, 270, 234-241.	3.1	36
142	Reactivity of surface nitrate species in the selective reduction of NO with propene over Na[ndash]H-mordenite as investigated by dynamic FTIR spectroscopy. Journal of the Chemical Society, Faraday Transactions, 1998, 94, 301-307.	1.7	35
143	Synthesis of NaÂ2Âmica from metakaolin and its cation exchange properties. Journal of Materials Chemistry, 2001, 11, 2072-2077.	6.7	35
144	Hydration of nitriles to amides in water by SiO2-supported Ag catalysts promoted by adsorbed oxygen atoms. Applied Catalysis A: General, 2012, 421-422, 114-120.	2.2	35

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145	Synthesis of 2,5-disubstituted pyrroles via dehydrogenative condensation of secondary alcohols and 1,2-amino alcohols by supported platinum catalysts. Organic Chemistry Frontiers, 2016, 3, 846-851.	2.3	35
146	Ag Clusters as Active Species for HC-SCR Over Ag-Zeolites. Catalysis Surveys From Asia, 2005, 9, 75-85.	1.0	34
147	X-ray Photoelectron Spectroscopy of Fast-Frozen Hematite Colloids in Aqueous Solutions. 3. Stabilization of Ammonium Species by Surface (Hydr)oxo Groups. Journal of Physical Chemistry C, 2011, 115, 6796-6801.	1.5	34
148	Versatile and Sustainable Synthesis of Cyclic Imides from Dicarboxylic Acids and Amines by Nb₂O₅ as a Baseâ€Tolerant Heterogeneous Lewis Acid Catalyst. Chemistry - A European Journal, 2014, 20, 14256-14260.	1.7	34
149	Transformation of Bulk Pd to Pd Cations in Small-Pore CHA Zeolites Facilitated by NO. Jacs Au, 2021, 1, 201-211.	3.6	34
150	Nickelâ€Based Highâ€Entropy Intermetallic as a Highly Active and Selective Catalyst for Acetylene Semihydrogenation. Angewandte Chemie - International Edition, 2022, 61, .	7.2	34
151	Selfâ€Regenerative Silver Nanocluster Catalyst for CO Oxidation. ChemCatChem, 2011, 3, 1290-1293.	1.8	33
152	Pt/Fe-containing alumina catalysts prepared and treated with water under moderate conditions exhibit low-temperature CO oxidation activity. Catalysis Communications, 2012, 17, 194-199.	1.6	33
153	Quantitative determination of average rhodium oxidation state by a simple XANES analysis. Applied Catalysis B: Environmental, 2012, 111-112, 509-514.	10.8	33
154	Self-coupling of secondary alcohols by Ni/CeO2 catalyst. Applied Catalysis A: General, 2013, 462-463, 137-142.	2.2	33
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