James A Dumesic

List of Publications by Year
in descending order

249 papers	39,664 citations	3264 94 h-index	2970 195 g-index
266 all docs	266 docs citations	266 times ranked	24169 citing authors

#	Article	IF	Citations
1	Catalytic conversion of cellulose to levoglucosenone using propylsulfonic acid functionalized SBA-15 and H2SO4 in tetrahydrofuran. Biomass and Bioenergy, 2022, 156, 106315.	2.9	4
2	Ethanol to distillate-range molecules using Cu/MgxAlOy catalysts with low Cu loadings. Applied Catalysis B: Environmental, 2022, 304, 120984.	10.8	16
3	Mechanistic Study of 1,2-Dichloroethane Hydrodechlorination on Cu-Rich Ptâ€“Cu Alloys: Combining Reaction Kinetics Experiments with DFT Calculations and Microkinetic Modeling. ACS Sustainable Chemistry and Engineering, 2022, 10, 1509-1523.	3.2	4
4	Controlled hydrogenation of a biomass-derived platform chemical formed by aldol-condensation of 5-hydroxymethyl furfural (HMF) and acetone over Ru, Pd, and Cu catalysts. Green Chemistry, 2022, 24, 2146-2159.	4.6	14
5	Identifying hydroxylated copper dimers in SSZ-13 <i>via</i> UV-vis-NIR spectroscopy. Catalysis Science and Technology, 2022, 12, 2744-2748.	2.1	7
6	Effect of catalyst support on cobalt catalysts for ethylene oligomerization into linear olefins. Catalysis Science and Technology, 2022, 12, 3639-3649.	2.1	5
7	Solvent and Chloride Ion Effects on the Acid-Catalyzed Conversion of Glucose to 5-Hydroxymethylfurfural. ACS Sustainable Chemistry and Engineering, 2022, 10, 8275-8288.	3.2	8
8	Microkinetic Modeling: A Tool for Rational Catalyst Design. Chemical Reviews, 2021, 121, 1049-1076.	23.0	191
9	Synthesis of performance-advantaged polyurethanes and polyesters from biomass-derived monomers by aldol-condensation of 5-hydroxymethyl furfural and hydrogenation. Green Chemistry, 2021, 23, 4355-4364.	4.6	25
10	Renewable linear alpha-olefins by base-catalyzed dehydration of biologically-derived fatty alcohols. Green Chemistry, 2021, 23, 4338-4354.	4.6	9
11	Design of closed-loop recycling production of a Dielsâ€“Alder polymer from a biomass-derived difuran as a functional additive for polyurethanes. Green Chemistry, 2021, 23, 9479-9488.	4.6	14
12	Sustainable production of 5-hydroxymethyl furfural from glucose for process integration with high fructose corn syrup infrastructure. Green Chemistry, 2021, 23, 3277-3288.	4.6	30
13	Effects of water on the kinetics of acetone hydrogenation over Pt and Ru catalysts. Journal of Catalysis, 2021, 403, 215-227.	3.1	10
14	Visualizing plant cell wall changes proves the superiority of hydrochloric acid over sulfuric acid catalyzed Î³-valerolactone pretreatment. Chemical Engineering Journal, 2021, 412, 128660.	6.6	26
15	Reaction kinetics study of ethylene oligomerization into linear olefins over carbon-supported cobalt catalysts. Journal of Catalysis, 2021, 404, 954-963.	3.1	4
16	Hydrodechlorination of 1,2-Dichloroethane on Platinum Catalysts: Insights from Reaction Kinetics Experiments, Density Functional Theory, and Microkinetic Modeling. ACS Catalysis, 2021, 11, 7890-7905.	5.5	12
17	Chemical kinetics for generalized two-step reaction schemes. Journal of Catalysis, 2021, , .	3.1	1
18	Ethylene oligomerization into linear olefins over cobalt oxide on carbon catalyst. Catalysis Science and Technology, 2021, 11, 3599-3608.	2.1	10

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19	The relevance of Lewis acid sites on the gas phase reaction of levulinic acid into ethyl valerate using CoSBA-xAl bifunctional catalysts. Catalysis Science and Technology, 2021, 11, 4280-4293.	2.1	5
20	Production of Hexane-1,2,5,6-tetrol from Biorenewable Levoglucosanol over Pt-WO_{<i>x</i>}/TiO₂. ACS Sustainable Chemistry and Engineering, 2021, 9, 16123-16132.	3.2	3
21	A machine learning framework for the analysis and prediction of catalytic activity from experimental data. Applied Catalysis B: Environmental, 2020, 263, 118257.	10.8	76
22	Synthesis of Hexane-Tetrols and -Triols with Fixed Hydroxyl Group Positions and Stereochemistry from Methyl Glycosides over Supported Metal Catalysts. ACS Sustainable Chemistry and Engineering, 2020, 8, 800-805.	3.2	13
23	Catalytic Production of Glucoseâ€"Galactose Syrup from Greek Yogurt Acid Whey in a Continuousâ€Flow Reactor. ChemSusChem, 2020, 13, 791-802.	3.6	6
24	Effect of Mixed-Solvent Environments on the Selectivity of Acid-Catalyzed Dehydration Reactions. ACS Catalysis, 2020, 10, 1679-1691.	5.5	45
25	Synthesis Gas Conversion Over Molybdenum-Based Catalysts Promoted by Transition Metals. ACS Catalysis, 2020, 10, 365-374.	5.5	21
26	Chemicalâ€Switching Strategy for Synthesis and Controlled Release of Norcantharimides from a Biomassâ€Derived Chemical. ChemSusChem, 2020, 13, 5213-5219.	3.6	20
27	Recycling of multilayer plastic packaging materials by solvent-targeted recovery and precipitation. Science Advances, 2020, 6, .	4.7	170
28	Production of renewable alcohols from maple wood using supercritical methanol hydrodeoxygenation in a semi-continuous flowthrough reactor. Green Chemistry, 2020, 22, 8462-8477.	4.6	9
29	Production of <i>p</i>-Coumaric Acid from Corn GVL-Lignin. ACS Sustainable Chemistry and Engineering, 2020, 8, 17427-17438.	3.2	41
30	Mechanistic Insights into the Conversion of Biorenewable Levoglucosanol to Dideoxysugars. ACS Sustainable Chemistry and Engineering, 2020, 8, 16339-16349.	3.2	4
31	Catalytic strategy for conversion of fructose to organic dyes, polymers, and liquid fuels. Green Chemistry, 2020, 22, 5285-5295.	4.6	21
32	Rates of levoglucosanol hydrogenolysis over BrÃ,nsted and Lewis acid sites on platinum silica-alumina catalysts synthesized by atomic layer deposition. Journal of Catalysis, 2020, 389, 111-120.	3.1	8
33	Mechanistic Study of Diaryl Ether Bond Cleavage during Palladiumâ€Catalyzed Lignin Hydrogenolysis. ChemSusChem, 2020, 13, 4487-4494.	3.6	36
34	Reaction Mechanism of Vapor-Phase Formic Acid Decomposition over Platinum Catalysts: DFT, Reaction Kinetics Experiments, and Microkinetic Modeling. ACS Catalysis, 2020, 10, 4112-4126.	5.5	51
35	AgPd and CuPd Catalysts for Selective Hydrogenation of Acetylene. ACS Catalysis, 2020, 10, 8567-8581.	5.5	96
36	Enhanced Acid-Catalyzed Lignin Depolymerization in a Continuous Reactor with Stable Activity. ACS Sustainable Chemistry and Engineering, 2020, 8, 4096-4106.	3.2	25

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37	A self-adjusting platinum surface for acetone hydrogenation. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 3446-3450.	3.3	17
38	Rational Design of Mixed Solvent Systems for Acid-Catalyzed Biomass Conversion Processes Using a Combined Experimental, Molecular Dynamics and Machine Learning Approach. Topics in Catalysis, 2020, 63, 649-663.	1.3	11
39	Solid-State NMR Studies of Solvent-Mediated, Acid-Catalyzed Woody Biomass Pretreatment for Enzymatic Conversion of Residual Cellulose. ACS Sustainable Chemistry and Engineering, 2020, 8, 6551-6563.	3.2	10
40	Synthesis of biomass-derived feedstocks for the polymers and fuels industries from 5-(hydroxymethyl)furfural (HMF) and acetone. Green Chemistry, 2019, 21, 5532-5540.	4.6	57
41	Catalytic hydrogenation of dihydrolevoglucosenone to levoglucosanol with a hydrotalcite/mixed oxide copper catalyst. Green Chemistry, 2019, 21, 5000-5007.	4.6	18
42	Catalytic C-O bond hydrogenolysis of tetrahydrofuran-dimethanol over metal supported WOx/TiO2 catalysts. Applied Catalysis B: Environmental, 2019, 258, 117945.	10.8	32
43	Catalytic dehydration of levoglucosan to levoglucosenone using BrÃ¸nsted solid acid catalysts in tetrahydrofuran. Green Chemistry, 2019, 21, 4988-4999.	4.6	33
44	A comparative study of secondary depolymerization methods on oxidized lignins. Green Chemistry, 2019, 21, 3940-3947.	4.6	38
45	Hexane-1,2,5,6-tetrol as a Versatile and Biobased Building Block for the Synthesis of Sustainable (Chiral) Crystalline Mesoporous Polyboronates. ACS Sustainable Chemistry and Engineering, 2019, 7, 13430-13436.	3.2	7
46	Condensed Phase Deactivation of Solid BrÃ¸nsted Acids in the Dehydration of Fructose to Hydroxymethylfurfural. ACS Catalysis, 2019, 9, 11568-11578.	5.5	19
47	Hydrodechlorination of 1,2-dichloroethane on supported AgPd catalysts. Journal of Catalysis, 2019, 370, 241-250.	3.1	27
48	Growth-coupled bioconversion of levulinic acid to butanone. Metabolic Engineering, 2019, 55, 92-101.	3.6	16
49	On the nature of active sites for formic acid decomposition on gold catalysts. Catalysis Science and Technology, 2019, 9, 2836-2848.	2.1	24
50	<i>In situ</i>, <i>operando</i> studies on the size and structure of supported Pt catalysts under supercritical conditions by simultaneous synchrotron-based X-ray techniques. Physical Chemistry Chemical Physics, 2019, 21, 11740-11747.	1.3	7
51	Supercritical methanol depolymerization and hydrodeoxygenation of lignin and biomass over reduced copper porous metal oxides. Green Chemistry, 2019, 21, 2988-3005.	4.6	63
52	Kinetic and mechanistic insights into hydrogenolysis of lignin to monomers in a continuous flow reactor. Green Chemistry, 2019, 21, 3561-3572.	4.6	56
53	Chemistries and processes for the conversion of ethanol into middle-distillate fuels. Nature Reviews Chemistry, 2019, 3, 223-249.	13.8	132
54	Effects of chloride ions in acid-catalyzed biomass dehydration reactions in polar aprotic solvents. Nature Communications, 2019, 10, 1132.	5.8	117

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55	Solvent system for effective near-term production of hydroxymethylfurfural (HMF) with potential for long-term process improvement. Energy and Environmental Science, 2019, 12, 2212-2222.	15.6	135
56	Ethanol condensation at elevated pressure over copper on AlMgO and AlCaO porous mixed-oxide supports. Catalysis Science and Technology, 2019, 9, 2032-2042.	2.1	25
57	Computational Framework for the Identification of Bioprivileged Molecules. ACS Sustainable Chemistry and Engineering, 2019, 7, 2414-2428.	3.2	20
58	Synthesis Gas Conversion over Rh/Mo Catalysts Prepared by Atomic Layer Deposition. ACS Catalysis, 2019, 9, 1810-1819.	5.5	33
59	Fundamental catalytic challenges to design improved biomass conversion technologies. Journal of Catalysis, 2019, 369, 518-525.	3.1	64
60	Solvent-enabled control of reactivity for liquid-phase reactions of biomass-derived compounds. Nature Catalysis, 2018, 1, 199-207.	16.1	211
61	Intrinsic activity of interfacial sites for Pt-Fe and Pt-Mo catalysts in the hydrogenation of carbonyl groups. Applied Catalysis B: Environmental, 2018, 231, 182-190.	10.8	41
62	Microkinetic Analysis and Scaling Relations for Catalyst Design. Annual Review of Chemical and Biomolecular Engineering, 2018, 9, 413-450.	3.3	73
63	Oxygenated commodity chemicals from chemoâ€catalytic conversion of biomass derived heterocycles. AIChE Journal, 2018, 64, 1910-1922.	1.8	73
64	A General Framework for the Evaluation of Direct Nonoxidative Methane Conversion Strategies. Joule, 2018, 2, 349-365.	11.7	86
65	Production of Alcohols from Cellulose by Supercritical Methanol Depolymerization and Hydrodeoxygenation. ACS Sustainable Chemistry and Engineering, 2018, 6, 4330-4344.	3.2	41
66	Universal kinetic solvent effects in acid-catalyzed reactions of biomass-derived oxygenates. Energy and Environmental Science, 2018, 11, 617-628.	15.6	122
67	Lignin Conversion to Low-Molecular-Weight Aromatics via an Aerobic Oxidation-Hydrolysis Sequence: Comparison of Different Lignin Sources. ACS Sustainable Chemistry and Engineering, 2018, 6, 3367-3374.	3.2	118
68	Toward biomass-derived renewable plastics: Production of 2,5-furandicarboxylic acid from fructose. Science Advances, 2018, 4, eaap9722.	4.7	276
69	Synthesis of 1,6-Hexanediol from Cellulose Derived Tetrahydrofuran-Dimethanol with Pt-WO_{<i>x</i>}/TiO₂ Catalysts. ACS Catalysis, 2018, 8, 1427-1439.	5.5	111
70	Ethane dehydrogenation on pristine and AlO_x decorated Pt stepped surfaces. Catalysis Science and Technology, 2018, 8, 2159-2174.	2.1	18
71	Production of monosaccharides and whey protein from acid whey waste streams in the dairy industry. Green Chemistry, 2018, 20, 1824-1834.	4.6	40
72	Mechanistic Insights into the Hydrogenolysis of Levoglucosanol over Bifunctional Platinum Silicaâ€“Alumina Catalysts. ACS Catalysis, 2018, 8, 3743-3753.	5.5	15

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73	Catalysts synthesized by selective deposition of Fe onto Pt for the water-gas shift reaction. Applied Catalysis B: Environmental, 2018, 222, 182-190.	10.8	34
74	The role of Pt-FexOy interfacial sites for CO oxidation. Journal of Catalysis, 2018, 358, 19-26.	3.1	46
75	Improving economics of lignocellulosic biofuels: An integrated strategy for coproducing 1,5-pentanediol and ethanol. Applied Energy, 2018, 213, 585-594.	5.1	60
76	Amination of 1-hexanol on bimetallic AuPd/TiO₂catalysts. Green Chemistry, 2018, 20, 4695-4709.	4.6	22
77	An â€œideal ligninâ€•facilitates full biomass utilization. Science Advances, 2018, 4, eaau2968.	4.7	184
78	Synthesis Gas Conversion over Rh-Mn-W_{<i>x</i>}C/SiO₂ Catalysts Prepared by Atomic Layer Deposition. ACS Catalysis, 2018, 8, 10707-10720.	5.5	17
79	Gold-catalyzed conversion of lignin to low molecular weight aromatics. Chemical Science, 2018, 9, 8127-8133.	3.7	61
80	Catalytic production of hexane-1,2,5,6-tetrol from bio-renewable levoglucosanol in water: effect of metal and acid sites on (stereo)-selectivity. Green Chemistry, 2018, 20, 4557-4565.	4.6	21
81	Enhanced Furfural Yields from Xylose Dehydration in the Î³â€Valerolactone/Water Solvent System at Elevated Temperatures. ChemSusChem, 2018, 11, 2321-2331.	3.6	69
82	Enhanced Furfural Yields from Xylose Dehydration in the Î³-Valerolactone/Water Solvent System at Elevated Temperatures. ChemSusChem, 2018, 11, 2266-2266.	3.6	4
83	Selective Production of Terminally Unsaturated Methyl Esters from Lactones Over Metal Oxide Catalysts. Catalysis Letters, 2018, 148, 3072-3081.	1.4	6
84	Improving the production of maleic acid from biomass: TS-1 catalysed aqueous phase oxidation of furfural in the presence of Î³-valerolactone. Green Chemistry, 2018, 20, 2845-2856.	4.6	58
85	Methane Conversion to Ethylene and Aromatics on PtSn Catalysts. ACS Catalysis, 2017, 7, 2088-2100.	5.5	93
86	Characterizing Substrateâ€“Surface Interactions on Alumina-Supported Metal Catalysts by Dynamic Nuclear Polarization-Enhanced Double-Resonance NMR Spectroscopy. Journal of the American Chemical Society, 2017, 139, 2702-2709.	6.6	59
87	Functionality and molecular weight distribution of red oak lignin before and after pyrolysis and hydrogenation. Green Chemistry, 2017, 19, 1378-1389.	4.6	80
88	Chemicals from Biomass: Combining Ringâ€Opening Tautomerization and Hydrogenation Reactions to Produce 1,5â€Pentanediol from Furfural. ChemSusChem, 2017, 10, 1351-1355.	3.6	100
89	Production of 1,6-hexanediol from tetrahydropyran-2-methanol by dehydrationâ€“hydration and hydrogenation. Green Chemistry, 2017, 19, 1390-1398.	4.6	24
90	Conversion of Furfural to 1,5-Pentanediol: Process Synthesis and Analysis. ACS Sustainable Chemistry and Engineering, 2017, 5, 4699-4706.	3.2	104

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91	Increasing the revenue from lignocellulosic biomass: Maximizing feedstock utilization. Science Advances, 2017, 3, e1603301.	4.7	352
92	Production of levoglucosenone and 5-hydroxymethylfurfural from cellulose in polar aprotic solventâ€"water mixtures. Green Chemistry, 2017, 19, 3642-3653.	4.6	121
93	Comparison of Fast Pyrolysis Behavior of Cornstover Lignins Isolated by Different Methods. ACS Sustainable Chemistry and Engineering, 2017, 5, 5657-5661.	3.2	13
94	Transitionâ€Metal Nitride Core@Nobleâ€Metal Shell Nanoparticles as Highly CO Tolerant Catalysts. Angewandte Chemie - International Edition, 2017, 56, 8828-8833.	7.2	88
95	Transitionâ€Metal Nitride Core@Nobleâ€Metal Shell Nanoparticles as Highly CO Tolerant Catalysts. Angewandte Chemie, 2017, 129, 8954-8959.	1.6	11
96	Synthesis Gas Conversion over Rh-Based Catalysts Promoted by Fe and Mn. ACS Catalysis, 2017, 7, 4550-4563.	5.5	51
97	Operando Solid-State NMR Observation of Solvent-Mediated Adsorption-Reaction of Carbohydrates in Zeolites. ACS Catalysis, 2017, 7, 3489-3500.	5.5	70
98	A co-solvent hydrolysis strategy for the production of biofuels: process synthesis and technoeconomic analysis. Reaction Chemistry and Engineering, 2017, 2, 397-405.	1.9	38
99	New catalytic strategies for Î±,Ï‰-diols production from lignocellulosic biomass. Faraday Discussions, 2017, 202, 247-267.	1.6	61
100	Hydrogenation of levoglucosenone to renewable chemicals. Green Chemistry, 2017, 19, 1278-1285.	4.6	70
101	Hydrogenation of Î³-Butyrolactone to 1,4-Butanediol over CuCo/TiO₂ Bimetallic Catalysts. ACS Catalysis, 2017, 7, 8429-8440.	5.5	52
102	Solventâ€"Solid Interface of Acid Catalysts Studied by High Resolution MAS NMR. Journal of Physical Chemistry C, 2017, 121, 17226-17234.	1.5	11
103	Supported two- and three-dimensional vanadium oxide species on the surface of Î²-SiC. Catalysis Science and Technology, 2017, 7, 3707-3714.	2.1	7
104	Ring Opening of Biomass-Derived Cyclic Ethers to Dienes over Silica/Alumina. ACS Catalysis, 2017, 7, 5248-5256.	5.5	36
105	Kinetics of Levoglucosenone Isomerization. ChemSusChem, 2017, 10, 129-138.	3.6	37
106	Effect of Particle Size upon Pt/SiO₂ Catalytic Cracking of <i>n</i>â€Dodecane under Supercritical Conditions: Inâ€…situ SAXS and XANES Studies. ChemCatChem, 2017, 9, 99-102.	1.8	11
107	Self-assembly of noble metal monolayers on transition metal carbide nanoparticle catalysts. Science, 2016, 352, 974-978.	6.0	495
108	Correction to â€œSelective Hydrogenation of Unsaturated Carbonâ€"Carbon Bonds in Aromatic-Containing Platform Moleculesâ€• ACS Catalysis, 2016, 6, 3127-3127.	5.5	0

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109	Analysis of reaction schemes using maximum rates of constituent steps. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E2879-88.	3.3	35
110	Role of the Cu-ZrO₂ Interfacial Sites for Conversion of Ethanol to Ethyl Acetate and Synthesis of Methanol from CO₂ and H₂. ACS Catalysis, 2016, 6, 7040-7050.	5.5	136
111	Effect of carbon supports on RhRe bifunctional catalysts for selective hydrogenolysis of tetrahydropyran-2-methanol. Catalysis Science and Technology, 2016, 6, 7841-7851.	2.1	25
112	An engineered solvent system for sugar production from lignocellulosic biomass using biomass derived Î³-valerolactone. Green Chemistry, 2016, 18, 5756-5763.	4.6	55
113	Measurement of intrinsic catalytic activity of Pt monometallic and Pt-MoOx interfacial sites over visible light enhanced PtMoOx/SiO2 catalyst in reverse water gas shift reaction. Journal of Catalysis, 2016, 344, 784-794.	3.1	45
114	Coupling chemical and biological catalysis: a flexible paradigm for producing biobased chemicals. Current Opinion in Biotechnology, 2016, 38, 54-62.	3.3	74
115	PtMo Bimetallic Catalysts Synthesized by Controlled Surface Reactions for Water Gas Shift. ACS Catalysis, 2016, 6, 1334-1344.	5.5	37
116	Identifying low-coverage surface species on supported noble metal nanoparticle catalysts by DNP-NMR. Chemical Communications, 2016, 52, 1859-1862.	2.2	36
117	Active sites and mechanisms for H ₂ O ₂ decomposition over Pd catalysts. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E1973-82.	3.3	171
118	Selective Hydrogenation of Unsaturated Carbonâ€“Carbon Bonds in Aromatic-Containing Platform Molecules. ACS Catalysis, 2016, 6, 2047-2054.	5.5	23
119	Modifying the Surface Properties of Heterogeneous Catalysts Using Polymer-Derived Microenvironments. Topics in Catalysis, 2016, 59, 19-28.	1.3	8
120	Methionine bound to Pd/Î³-Al2O3 catalysts studied by solid-state 13C NMR. Solid State Nuclear Magnetic Resonance, 2015, 72, 64-72.	1.5	7
121	Graphiticâ€Carbon Layers on Oxides: Toward Stable Heterogeneous Catalysts for Biomass Conversion Reactions. Angewandte Chemie, 2015, 127, 8050-8054.	1.6	11
122	Effects of Water on the Copperâ€Catalyzed Conversion of Hydroxymethylfurfural in Tetrahydrofuran. ChemSusChem, 2015, 8, 3983-3986.	3.6	47
123	Solventâ€Enabled Nonenyzmatic Sugar Production from Biomass for Chemical and Biological Upgrading. ChemSusChem, 2015, 8, 1317-1322.	3.6	30
124	Synthesis of Supported RhMo and PtMo Bimetallic Catalysts by Controlled Surface Reactions. ChemCatChem, 2015, 7, 3881-3886.	1.8	26
125	Graphiticâ€Carbon Layers on Oxides: Toward Stable Heterogeneous Catalysts for Biomass Conversion Reactions. Angewandte Chemie - International Edition, 2015, 54, 7939-7943.	7.2	63
126	Dehydration of cellulose to levoglucosenone using polar aprotic solvents. Energy and Environmental Science, 2015, 8, 1808-1815.	15.6	167

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127	Synthesis of supported bimetallic nanoparticles with controlled size and composition distributions for active site elucidation. Journal of Catalysis, 2015, 328, 75-90.	3.1	57
128	A lignocellulosic ethanol strategy via nonenzymatic sugar production: Process synthesis and analysis. Bioresource Technology, 2015, 182, 258-266.	4.8	91
129	Catalyst Design with Atomic Layer Deposition. ACS Catalysis, 2015, 5, 1804-1825.	5.5	608
130	Inhibition of Metal Hydrogenation Catalysts by Biogenic Impurities. Catalysis Letters, 2015, 145, 15-22.	1.4	27
131	Reverse Waterâ€"Gas Shift on Interfacial Sites Formed by Deposition of Oxidized Molybdenum Moieties onto Gold Nanoparticles. Journal of the American Chemical Society, 2015, 137, 10317-10325.	6.6	87
132	Lignin monomer production integrated into the Î³-valerolactone sugar platform. Energy and Environmental Science, 2015, 8, 2657-2663.	15.6	212
133	Tuning Acidâ€"Base Properties Using Mgâ€"Al Oxide Atomic Layer Deposition. ACS Applied Materials & Interfaces, 2015, 7, 16573-16580.	4.0	20
134	Stabilizing cobalt catalysts for aqueous-phase reactions by strong metal-support interaction. Journal of Catalysis, 2015, 330, 19-27.	3.1	111
135	Carbon Overcoating of Supported Metal Catalysts for Improved Hydrothermal Stability. ACS Catalysis, 2015, 5, 4546-4555.	5.5	88
136	Selective Production of Levulinic Acid from Furfuryl Alcohol in THF Solvent Systems over H-ZSM-5. ACS Catalysis, 2015, 5, 3354-3359.	5.5	116
137	Direct Synthesis of Hydrogen Peroxide Over Auâ€"Pd Catalysts Prepared by Electroless Deposition. Catalysis Letters, 2015, 145, 2057-2065.	1.4	11
138	Plasmon-enhanced reverse water gas shift reaction over oxide supported Au catalysts. Catalysis Science and Technology, 2015, 5, 2590-2601.	2.1	104
139	Operando X-ray Absorption Spectroscopy Studies of Sintering for Supported Copper Catalysts during Liquid-phase Reaction. ChemCatChem, 2014, 6, 2437-2437.	1.8	0
140	Engineering Catalyst Microenvironments for Metalâ€Catalyzed Hydrogenation of Biologically Derived Platform Chemicals. Angewandte Chemie - International Edition, 2014, 53, 12718-12722.	7.2	64
141	Formic acid decomposition on Au catalysts: DFT, microkinetic modeling, and reaction kinetics experiments. AIChE Journal, 2014, 60, 1303-1319.	1.8	87
142	Bridging the Chemical and Biological Catalysis Gap: Challenges and Outlooks for Producing Sustainable Chemicals. ACS Catalysis, 2014, 4, 2060-2069.	5.5	160
143	A strategy for the simultaneous catalytic conversion of hemicellulose and cellulose from lignocellulosic biomass to liquid transportation fuels. Green Chemistry, 2014, 16, 653-661.	4.6	124
144	Nonenzymatic Sugar Production from Biomass Using Biomass-Derived Î³-Valerolactone. Science, 2014, 343, 277-280.	6.0	607

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145	Solvent Effects in Acidâ€Catalyzed Biomass Conversion Reactions. Angewandte Chemie - International Edition, 2014, 53, 11872-11875.	7.2	371
146	Engineering Catalyst Microenvironments for Metalâ€Catalyzed Hydrogenation of Biologically Derived Platform Chemicals. Angewandte Chemie, 2014, 126, 12932-12936.	1.6	11
147	Targeted chemical upgrading of lignocellulosic biomass to platform molecules. Green Chemistry, 2014, 16, 4816-4838.	4.6	399
148	Effects of Î³-valerolactone in hydrolysis of lignocellulosic biomass to monosaccharides. Green Chemistry, 2014, 16, 4659-4662.	4.6	149
149	Density Functional Theory Calculations and Analysis of Reaction Pathways for Reduction of Nitric Oxide by Hydrogen on Pt(111). ACS Catalysis, 2014, 4, 3307-3319.	5.5	93
150	Production of renewable jet fuel range alkanes and commodity chemicals from integrated catalytic processing of biomass. Energy and Environmental Science, 2014, 7, 1500-1523.	15.6	342
151	Selective Conversion of Cellulose to Hydroxymethylfurfural in Polar Aprotic Solvents. ChemCatChem, 2014, 6, 2229-2234.	1.8	110
152	Enhanced stability of cobalt catalysts by atomic layer deposition for aqueous-phase reactions. Energy and Environmental Science, 2014, 7, 1657.	15.6	109
153	Operando Xâ€ray Absorption Spectroscopy Studies of Sintering for Supported Copper Catalysts during Liquidâ€phase Reaction. ChemCatChem, 2014, 6, 2493-2496.	1.8	24
154	Tandem Catalytic Conversion of Glucose to 5-Hydroxymethylfurfural with an Immobilized Enzyme and a Solid Acid. ACS Catalysis, 2014, 4, 2165-2168.	5.5	102
155	Frontispiece: Engineering Catalyst Microenvironments for Metal-Catalyzed Hydrogenation of Biologically Derived Platform Chemicals. Angewandte Chemie - International Edition, 2014, 53, .	7.2	0
156	Frontispiz: Engineering Catalyst Microenvironments for Metal-Catalyzed Hydrogenation of Biologically Derived Platform Chemicals. Angewandte Chemie, 2014, 126, n/a-n/a.	1.6	0
157	Aqueous Phase Glycerol Reforming with Pt and PtMo Bimetallic Nanoparticle Catalysts: The Role of the Mo Promoter. Topics in Catalysis, 2013, 56, 1814-1828.	1.3	32
158	Production of Furfural from Lignocellulosic Biomass Using Beta Zeolite and Biomass-Derived Solvent. Topics in Catalysis, 2013, 56, 1775-1781.	1.3	111
159	Exploring Meerweinâ€"Ponndorfâ€"Verley Reduction Chemistry for Biomass Catalysis Using a First-Principles Approach. ACS Catalysis, 2013, 3, 2694-2704.	5.5	92
160	Bimetallic RhRe/C catalysts for the production of biomass-derived chemicals. Journal of Catalysis, 2013, 308, 226-236.	3.1	69
161	Gamma-valerolactone, a sustainable platform molecule derived from lignocellulosic biomass. Green Chemistry, 2013, 15, 584.	4.6	868
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