

Insights into the Interplay of Lewis and Brønsted Acid Conversion to 5-(Hydroxymethyl)furfural and Levulinic

Journal of the American Chemical Society

135, 3997-4006

DOI: 10.1021/ja3122763

Citation Report

#	ARTICLE	IF	CITATIONS
2	Toward Functional Polyester Building Blocks from Renewable Glycolaldehyde with Sn Cascade Catalysis. <i>ACS Catalysis</i> , 2013, 3, 1786-1800.	5.5	97
3	Conversion of glucose and cellulose into value-added products in water and ionic liquids. <i>Green Chemistry</i> , 2013, 15, 2619.	4.6	256
4	Catalytic conversion of fructose and sucrose to 5-hydroxymethylfurfural using simple ionic liquid/DMF binary reaction media. <i>Catalysis Communications</i> , 2013, 42, 89-92.	1.6	18
5	Advanced glycoxidation and lipoxidation end products (AGEs and ALEs): an overview of their mechanisms of formation. <i>Free Radical Research</i> , 2013, 47, 3-27.	1.5	602
6	Selectivity enhancement in the aqueous acid-catalyzed conversion of glucose to 5-hydroxymethylfurfural induced by choline chloride. <i>Green Chemistry</i> , 2013, 15, 3205.	4.6	74
7	Synergy of Lewis and Brønsted Acids on Catalytic Hydrothermal Decomposition of Hexose to Levulinic Acid. <i>Energy & Fuels</i> , 2013, 27, 6973-6978.	2.5	66
8	Monosaccharide and disaccharide isomerization over Lewis acid sites in hydrophobic and hydrophilic molecular sieves. <i>Journal of Catalysis</i> , 2013, 308, 176-188.	3.1	150
9	Comparison of Homogeneous and Heterogeneous Catalysts for Glucose to Fructose Isomerization in Aqueous Media. <i>ChemSusChem</i> , 2013, 6, 2369-2376.	3.6	128
10	The Mechanism of Glucose Isomerization to Fructose over Sn-BEA Zeolite: A Periodic Density Functional Theory Study. <i>ChemSusChem</i> , 2013, 6, 1688-1696.	3.6	122
11	Catalytic Decomposition of Glucose to Levulinic Acid by Synergy of Organic Lewis Acid and Brønsted Acid in Water. <i>BioResources</i> , 2014, 10, .	0.5	7
12	InCl ₃ -catalyzed conversion of carbohydrates into 5-hydroxymethylfurfural in biphasic system. <i>Bioresource Technology</i> , 2014, 172, 457-460.	4.8	42
13	Theoretical Insight into the Coordination of Cyclic D-Glucose to [Al(OH) ₂ (aq)] ²⁺ and [Al(OH) ₂ (aq)] ¹⁺ Ions. <i>Journal of Physical Chemistry B</i> , 2014, 118, 13890-13902.	1.2	23
14	Distinctive Aldose Isomerization Characteristics and the Coordination Chemistry of Metal Chlorides in 1-Butyl-3-methylimidazolium Chloride. <i>ACS Catalysis</i> , 2014, 4, 4446-4454.	5.5	34
15	Aerobic Oxidation of Hydroxymethylfurfural and Furfural by Using Heterogeneous Co ₂ O ₃ -N@C Catalysts. <i>ChemSusChem</i> , 2014, 7, 3334-3340.	3.6	104
16	Some insight into the role of different copper species as acids in cellulose deconstruction. <i>Catalysis Communications</i> , 2014, 44, 19-23.	1.6	17
17	Sulfonic acid heterogeneous catalysts for dehydration of C ₆ -monosaccharides to 5-hydroxymethylfurfural in dimethyl sulfoxide. <i>Chinese Journal of Catalysis</i> , 2014, 35, 644-655.	6.9	34
18	A facile and efficient method to improve the selectivity of methyl lactate in the chemocatalytic conversion of glucose catalyzed by homogeneous Lewis acid. <i>Journal of Molecular Catalysis A</i> , 2014, 388-389, 74-80.	4.8	56
19	Zeolite-promoted transformation of glucose into 5-hydroxymethylfurfural in ionic liquid. <i>Chemical Engineering Journal</i> , 2014, 244, 137-144.	6.6	144

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20	Dehydration of fructose into furans over zeolite catalyst using carbon black as adsorbent. <i>Microporous and Mesoporous Materials</i> , 2014, 191, 10-17.	2.2	70
21	Top Chemical Opportunities from Carbohydrate Biomass: A Chemist's View of the Biorefinery. <i>Topics in Current Chemistry</i> , 2014, 353, 1-40.	4.0	125
22	Enhanced Conversion of Carbohydrates to the Platform Chemical 5-Hydroxymethylfurfural Using Designer Ionic Liquids. <i>ChemSusChem</i> , 2014, 7, 1647-1654.	3.6	65
23	Three-Phase Catalytic System of H_2O , Ionic Liquid, and $VOPO_4 \cdot SiO_2$ Solid Acid for Conversion of Fructose to 5-Hydroxymethylfurfural. <i>ChemSusChem</i> , 2014, 7, 1703-1709.	3.6	28
24	Kinetics of Homogeneous Brønsted Acid Catalyzed Fructose Dehydration and 5-Hydroxymethyl Furfural Rehydration: A Combined Experimental and Computational Study. <i>ACS Catalysis</i> , 2014, 4, 259-267.	5.5	122
25	Catalytic dehydration of C_6 carbohydrates for the production of hydroxymethylfurfural (HMF) as a versatile platform chemical. <i>Green Chemistry</i> , 2014, 16, 548-572.	4.6	523
26	Bifunctional SO_4/ZrO_2 catalysts for 5-hydroxymethylfurfural (5-HMF) production from glucose. <i>Catalysis Science and Technology</i> , 2014, 4, 333-342.	2.1	153
27	Hydroxymethylfurfural production from bioresources: past, present and future. <i>Green Chemistry</i> , 2014, 16, 2015.	4.6	425
28	Aqueous-phase fructose dehydration using Brønsted acid zeolites: Catalytic activity of dissolved aluminosilicate species. <i>Applied Catalysis A: General</i> , 2014, 469, 116-123.	2.2	48
29	Recent advancements in the production of hydroxymethylfurfural. <i>RSC Advances</i> , 2014, 4, 2037-2050.	1.7	101
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31	Selective Base-Catalyzed Isomerization of Glucose to Fructose. <i>ACS Catalysis</i> , 2014, 4, 4295-4298.	5.5	150
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33	Aqueous-phase hydrodeoxygenation of highly oxygenated aromatics on platinum. <i>Green Chemistry</i> , 2014, 16, 675-682.	4.6	31
34	One-pot transformation of polysaccharides via multi-catalytic processes. <i>Catalysis Science and Technology</i> , 2014, 4, 4138-4168.	2.1	68
35	Effect of Water on Hydrolytic Cleavage of Non-Terminal α -Glycosidic Bonds in Cyclodextrins To Generate Monosaccharides and Their Derivatives in a Dimethyl Sulfoxide-Water Mixture. <i>Journal of Physical Chemistry A</i> , 2014, 118, 1309-1319.	1.1	10
36	Creation of Brønsted acid sites on Sn-based solid catalysts for the conversion of biomass. <i>Journal of Materials Chemistry A</i> , 2014, 2, 3725.	5.2	48
37	Insights into the Cr catalyzed isomerization mechanism of glucose to fructose in the presence of water using ab initio molecular dynamics. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 19564-19572.	1.3	59

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38	Coupling metal halides with a co-solvent to produce furfural and 5-HMF at high yields directly from lignocellulosic biomass as an integrated biofuels strategy. <i>Green Chemistry</i> , 2014, 16, 3819-3829.	4.6	164
39	Insights into the Primary Decomposition Mechanism of Cellobiose under Hydrothermal Conditions. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 14607-14616.	1.8	22
40	Reactivity of Metal Catalysts in Glucose \leftrightarrow Fructose Conversion. <i>Chemistry - A European Journal</i> , 2014, 20, 12298-12309.	1.7	25
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42	Challenges of and Insights into Acid-Catalyzed Transformations of Sugars. <i>Journal of Physical Chemistry C</i> , 2014, 118, 22815-22833.	1.5	88
43	Comparison of the influence of a Lewis acid AlCl ₃ and a Brønsted acid HCl on the organosolv pulping of beech wood. <i>Green Chemistry</i> , 2014, 16, 1569.	4.6	47
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45	Group Additivity for Estimating Thermochemical Properties of Furanic Compounds on Pd(111). <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 11929-11938.	1.8	27
46	Chemoselective Hydrogenation of Biomass-Derived 5-Hydroxymethylfurfural into the Liquid Biofuel 2,5-Dimethylfuran. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 9969-9978.	1.8	128
47	5-Hydroxymethylfurfural and levulinic acid derived from monosaccharides dehydration promoted by InCl ₃ in aqueous medium. <i>Journal of Molecular Catalysis A</i> , 2014, 394, 114-120.	4.8	31
48	Salicylato Titanocene Complexes as Cooperative Organometallic Lewis Acid and Brønsted Acid Catalysts for Three-Component Mannich Reactions. <i>Chemistry - A European Journal</i> , 2014, 20, 8530-8535.	1.7	27
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50	High-yield production of levulinic acid from cellulose and its upgrading to γ -valerolactone. <i>Green Chemistry</i> , 2014, 16, 3846.	4.6	149
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54	A modified biphasic system for the dehydration of d-xylose into furfural using SO ₄ ²⁻ /TiO ₂ -ZrO ₂ /La ³⁺ as a solid catalyst. <i>Catalysis Today</i> , 2014, 234, 251-256.	2.2	76
55	Straightforward Synthesis of Levulinic Acid Ester from Lignocellulosic Biomass Resources. <i>Chemistry Letters</i> , 2014, 43, 1327-1329.	0.7	21

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57	Effect of Different Ionic Liquids on 5-Hydroxymethylfurfural Preparation from Glucose in DMA over AlCl ₃ : Experimental and Theoretical Study. Chinese Journal of Chemistry, 2015, 33, 583-588.	2.6	11
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76	Tandem Lewis/Brønsted homogeneous acid catalysis: conversion of glucose to 5-hydroxymethylfurfural in an aqueous chromium(III) chloride and hydrochloric acid solution. Green Chemistry, 2015, 17, 4725-4735.	4.6	114
77	Mechanistic Study of Glucose-to-Fructose Isomerization in Water Catalyzed by [Al(OH) ₂ (aq)] ⁺ . ACS Catalysis, 2015, 5, 5097-5103.	5.5	161
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106	In situ NMR spectroscopy: Inulin biomass conversion in ZnCl ₂ molten salt hydrate medium—SnCl ₄ addition controls product distribution. <i>Carbohydrate Polymers</i> , 2015, 115, 439-443.	5.1	23
107	Multiscale molecular modeling can be an effective tool to aid the development of biomass conversion technology: A perspective. <i>Chemical Engineering Science</i> , 2015, 121, 217-235.	1.9	38
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109	Superelectrophilic activation of 5-hydroxymethylfurfural and 2,5-diformylfuran: organic synthesis based on biomass-derived products. <i>Beilstein Journal of Organic Chemistry</i> , 2016, 12, 2125-2135.	1.3	22
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118	Isolation of fructose from high-fructose corn syrup with calcium immobilized strong acid cation exchanger: Isotherms, kinetics, and fixed-bed chromatography study. <i>Canadian Journal of Chemical Engineering</i> , 2016, 94, 537-546.	0.9	9
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136	Salt-Promoted Glucose Aqueous Isomerization Catalyzed by Heterogeneous Organic Base. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 4850-4858.	3.2	34
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