

CITATION REPORT

List of articles citing

Catalytic conversion of biomass to biofuels

DOI: 10.1039/c004654j
Green Chemistry, 2010, 12, 1493.

Source: <https://exaly.com/paper-pdf/49461064/citation-report.pdf>

Version: 2024-04-11

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
1887	Model-Based Design of Tailor-Made Biofuels.		
1886	Silica-immobilized piperazine: A sustainable organocatalyst for aldol and Knoevenagel reactions. 2010 , 51, 6670-6672		50
1885	Silica-supported guanidine catalyst for continuous flow biodiesel production. <i>Green Chemistry</i> , 2011 , 13, 3111	10	38
1884	One step catalytic conversion of cellulose to sustainable chemicals utilizing cooperative ionic liquid pairs. <i>Green Chemistry</i> , 2011 , 13, 2334	10	54
1883	Effects of Biomass Inorganics on Rhodium Catalysts: II. Autothermal Reforming of Ethanol. 2011 , 25, 4763-4769		13
1882	Catalytic Aerobic Oxidation of Renewable Furfural with Phosphomolybdic Acid Catalyst: an Alternative Route to Maleic Acid. 2011 , 115, 17516-17522		101
1881	Gluconic acid aqueous solution as a sustainable and recyclable promoting medium for organic reactions. <i>Green Chemistry</i> , 2011 , 13, 2204	10	62
1880	Chemocatalytic conversion of cellulose: opportunities, advances and pitfalls. 2011 , 1, 714		204
1879	Significant roles of Fe nanoparticles in mediating the thermal properties of polymers. 2011 , 7, 9078		7
1878	Stabilizing immobilized cellulase by ionic liquids for saccharification of cellulose solutions in 1-butyl-3-methylimidazolium chloride. <i>Green Chemistry</i> , 2011 , 13, 1406	10	54
1877	One-Pot Synthesis of 5-(Hydroxymethyl)furfural from Carbohydrates using Tin-Beta Zeolite. 2011 , 1, 408-410		544
1876	Metabolic engineering is key to a sustainable chemical industry. 2011 , 28, 1406-25		22
1875	Renewable Oxygenate Blending Effects on Gasoline Properties. 2011 , 25, 4723-4733		239
1874	Levulinic esters from the acid-catalysed reactions of sugars and alcohols as part of a bio-refinery. <i>Green Chemistry</i> , 2011 , 13, 1676	10	186
1873	Thermochemical Conversion of Biomass to Biofuels. 2011 , 51-77		35
1872	Renewable gasoline from aqueous phase hydrodeoxygenation of aqueous sugar solutions prepared by hydrolysis of maple wood. <i>Green Chemistry</i> , 2011 , 13, 91-101	10	105
1871	Efficient hydrolytic hydrogenation of cellulose in the presence of Ru-loaded zeolites and trace amounts of mineral acid. 2011 , 47, 5590-2		172

1870	Activation of Carbonyl-Containing Molecules with Solid Lewis Acids in Aqueous Media. 2011 , 1, 1566-1580		313
1869	Extracting wood lignin without dissolving or degrading cellulose: investigations on the use of food additive-derived ionic liquids. <i>Green Chemistry</i> , 2011 , 13, 3124	10	161
1868	Catalytic routes for the conversion of biomass into liquid hydrocarbon transportation fuels. 2011 , 4, 83-99		673
1867	Selective hydrogenolysis of biomass-derived xylitol to ethylene glycol and propylene glycol on supported Ru catalysts. <i>Green Chemistry</i> , 2011 , 13, 135-142	10	185
1866	Highly efficient dehydration of carbohydrates to 5-(chloromethyl)furfural (CMF), 5-(hydroxymethyl)furfural (HMF) and levulinic acid by biphasic continuous flow processing. <i>Green Chemistry</i> , 2011 , 13, 1114	10	88
1865	The irruption of polymers from renewable resources on the scene of macromolecular science and technology. <i>Green Chemistry</i> , 2011 , 13, 1061	10	542
1864	Xylose Isomerization to Xylulose and its Dehydration to Furfural in Aqueous Media. 2011 , 1, 1724-1728		271
1863	Properties and Performance of Levulinate Esters as Diesel Blend Components. 2011 , 25, 5422-5428		146
1862	Catalytic Hydrogenation of Corn Stalk to Ethylene Glycol and 1,2-Propylene Glycol. 2011 , 50, 6601-6608		100
1861	Catalytic conversion of biomass-derived feedstocks into olefins and aromatics with ZSM-5: the hydrogen to carbon effective ratio. 2011 , 4, 2297		376
1860	Catalytic production of levulinic acid from cellulose and other biomass-derived carbohydrates with sulfonated hyperbranched poly(arylene oxindole)s. 2011 , 4, 3601		193
1859	Selective Breakdown of (Ligno)cellulose in Ionic Liquids. 2011 ,		3
1858	A review of recent laboratory research and commercial developments in fast pyrolysis and upgrading. 2011 , 15, 4171-4186		348
1857	Isolation, identification and quantitation of hydroxycinnamic acid conjugates, potential platform chemicals, in the leaves and stems of <i>Miscanthus giganteus</i> using LC-ESI-MSn. 2011 , 72, 2376-84		59
1856	Interconversion between Valerolactone and pentenoic acid combined with decarboxylation to form butene over silica/alumina. 2011 , 281, 290-299		92
1855	The reactivity of mesoporous silica modified with acidic sites in the production of biodiesel. 2011 , 175, 471-476		21
1854	Effect of H ₂ S and CO on the transformation of 2-ethylphenol as a model compound of bio-crude over sulfided Mo-based catalysts: propositions of promoted active sites for deoxygenation pathways based on an experimental study. <i>Green Chemistry</i> , 2011 , 13, 2441	10	47
1853	5-Hydroxymethylfurfural (HMF) as a building block platform: Biological properties, synthesis and synthetic applications. <i>Green Chemistry</i> , 2011 , 13, 754	10	1186

1852	Recent Advances in the Catalytic Conversion of Cellulose. 2011 , 3, 82-94		462
1851	Ionic Liquids as Tools for the Acid-Catalyzed Hydrolysis/Dehydration of Saccharides to Furanic Aldehydes. 2011 , 3, 1686-1706		52
1850	Selective hydrogenation of ortho-chloronitrobenzene over Ru and Ir catalysts under the conditions of the aqueous-phase reforming of bioethanol. <i>Green Chemistry</i> , 2011 , 13, 1633	10	29
1849	Catalysis in biomass processing. 2011 , 3, 218-249		45
1848	Production of liquid hydrocarbon fuels by catalytic conversion of biomass-derived levulinic acid. <i>Green Chemistry</i> , 2011 , 13, 1755	10	267
1847	Recent advances in ionic liquid catalysis. <i>Green Chemistry</i> , 2011 , 13, 2619	10	535
1846	Creating and mastering nano-objects to design advanced catalytic materials. 2011 , 255, 1480-1498		74
1845	Ethanol dehydration to ethylene in a stratified autothermal millisecond reactor. 2011 , 4, 1151-6		19
1844	Production of biofuels from cellulose and corn stover using alkylphenol solvents. 2011 , 4, 1078-81		123
1843	Effective production of octane from biomass derivatives under mild conditions. 2011 , 4, 1758-61		63
1842	Direct hydrocyclization of biomass-derived levulinic acid to 2-methyltetrahydrofuran over nanocomposite copper/silica catalysts. 2011 , 4, 1749-52		163
1841	Highly Selective Decarbonylation of 5-(Hydroxymethyl)furfural in the Presence of Compressed Carbon Dioxide. 2011 , 123, 6963-6966		21
1840	Nach der Petrochemie: eine chemische Industrie auf der Basis erneuerbarer Ressourcen. 2011 , 123, 10686-10694		75
1839	Highly selective decarbonylation of 5-(hydroxymethyl)furfural in the presence of compressed carbon dioxide. 2011 , 50, 6831-4		92
1838	Beyond petrochemicals: the renewable chemicals industry. 2011 , 50, 10502-9		423
1837	The conversion of lignocellulosics to levulinic acid. 2011 , 5, 198-214		455
1836	The sea change in US biofuels' funding: from cellulosic ethanol to green gasoline. 2011 , 5, 495-504		20
1835	Catalysis for conversion of biomass to fuels via pyrolysis and gasification: A review. 2011 , 171, 1-13		462

1834	Cellulose reactivity and glycosidic bond cleavage in aqueous phase by catalytic and non catalytic transformations. 2011 , 402, 1-10		69
1833	Preparation of high-value chemicals from selective fast pyrolysis of bamboo directionally catalyzed by phosphoric acid. 2011 ,		
1832	A Novel Catalytic Strategy for the Production of Liquid Fuels from Ligno-cellulosic Biomass. 2011 , 29, 1723-1727		2
1831	Continuous-Flow Processes in Heterogeneously Catalyzed Transformations of Biomass Derivatives into Fuels and Chemicals. 2012 , 3, 114-132		36
1830	WITHDRAWN: Hydrogen and syngas from biomass. 2012 ,		2
1829	Hydrolysis of chitosan to yield levulinic acid and 5-hydroxymethylfurfural in water under microwave irradiation. <i>Green Chemistry</i> , 2012 , 14, 1480	10	129
1828	Dried chitosan-gels as organocatalysts for the production of biomass-derived platform chemicals. 2012 , 445-446, 180-186		48
1827	Synthesis and characterization of sulfated TiO ₂ nanorods and ZrO ₂ /TiO ₂ nanocomposites for the esterification of biobased organic acid. 2012 , 4, 4499-505		93
1826	The role of shape selectivity in catalytic fast pyrolysis of lignin with zeolite catalysts. 2012 , 447-448, 115-123	201	
1825	Catalytic materials that improve selectivity of biomass conversions. 2012 , 2, 12575		60
1824	Catalytic conversion of biomass-derived carbohydrates into fuels and chemicals via furanic aldehydes. 2012 , 2, 11184		291
1823	Novel compatible system of [C ₂ OHmim][OAc]-cellulases for the in situ hydrolysis of lignocellulosic biomass. 2012 , 2, 11712		13
1822	A roadmap for conversion of lignocellulosic biomass to chemicals and fuels. 2012 , 1, 218-224		244
1821	Periodic mesoporous organosilica functionalized sulfonic acids as highly efficient and recyclable catalysts in biodiesel production. 2012 , 2, 828		64
1820	Molecular mapping of the acid catalysed dehydration of fructose. 2012 , 48, 5850-2		162
1819	Mechanistic Insights into the Kinetic and Regiochemical Control of the Thiol-Promoted Catalytic Synthesis of Diphenolic Acid. 2012 , 2, 2700-2704		31
1818	A highly active and coke-resistant steam reforming catalyst comprising uniform nickel-iron alloy nanoparticles. 2012 , 5, 2312-4		116
1817	Highly durable Pt-supported niobia-silica aerogel catalysts in the aqueous-phase hydrodeoxygenation of 1-propanol. 2012 , 29, 40-47		16

1816	Catalytic transformations of biomass-derived acids into advanced biofuels. 2012 , 195, 162-168		96
1815	Catalytic dehydration of d-xylose to 2-furfuraldehyde in the presence of Zr-(W,Al) mixed oxides. Tracing by-products using two-dimensional gas chromatography-time-of-flight mass spectrometry. 2012 , 195, 127-135		35
1814	Aqueous-phase ketonization of acetic acid over Ru/TiO ₂ /carbon catalysts. 2012 , 295, 169-178		108
1813	Early stages of water/hydroxyl phase generation at transition metal surfaces--synergetic adsorption and O-H bond dissociation assistance. 2012 , 14, 15286-90		26
1812	Selective deoxygenation of stearic acid via an anhydride pathway. 2012 , 2, 9387		29
1811	Organocatalytic upgrading of the key biorefining building block by a catalytic ionic liquid and N-heterocyclic carbenes. <i>Green Chemistry</i> , 2012 , 14, 2738	10	57
1810	Selective oxidation of complex, water-insoluble biomass to formic acid using additives as reaction accelerators. 2012 , 5, 7956		131
1809	From biodiesel and bioethanol to liquid hydrocarbon fuels: new hydrotreating and advanced microbial technologies. 2012 , 5, 5638-5652		82
1808	A cyclic process for full enzymatic saccharification of pretreated cellulose with full recovery and reuse of the ionic liquid 1-butyl-3-methylimidazolium chloride. <i>Green Chemistry</i> , 2012 , 14, 2631	10	41
1807	Conversion of Xylose to Furfural Using Lewis and Brønsted Acid Catalysts in Aqueous Media. 2012 , 2, 2022-2028		261
1806	Biobased Chemicals from Conception toward Industrial Reality: Lessons Learned and To Be Learned. 2012 , 2, 1487-1499		146
1805	Catalytic conversion of biomass using solvents derived from lignin. <i>Green Chemistry</i> , 2012 , 14, 1573	10	108
1804	Ce promoted Pd/Nb catalysts for Valerolactone ring-opening and hydrogenation. <i>Green Chemistry</i> , 2012 , 14, 3318	10	35
1803	A sulfuric acid management strategy for the production of liquid hydrocarbon fuels via catalytic conversion of biomass-derived levulinic acid. 2012 , 5, 9690		69
1802	Upgrading of biomass transformation residue: influence of gas flow composition on acetic acid ketonic condensation. 2012 , 2, 359-363		12
1801	An in Situ NMR Study of the Mechanism for the Catalytic Conversion of Fructose to 5-Hydroxymethylfurfural and then to Levulinic Acid Using ¹³ C Labeled d-Fructose. 2012 , 2, 1211-1218		120
1800	Microkinetic modeling of Pt-catalyzed ethylene glycol steam reforming. 2012 , 431-432, 18-24		19
1799	Ubiquitous aluminum alkyls and alkoxides as effective catalysts for glucose to HMF conversion in ionic liquids. 2012 , 435-436, 78-85		14

1798	Recycling CO ₂ ? Computational Considerations of the Activation of CO ₂ with Homogeneous Transition Metal Catalysts. 2012 , 4, 1703-1712		56
1797	Synthesis of high-quality diesel with furfural and 2-methylfuran from hemicellulose. 2012 , 5, 1958-66		152
1796	Electrocatalytic reduction of acetone in a proton-exchange-membrane reactor: a model reaction for the electrocatalytic reduction of biomass. 2012 , 5, 2410-20		39
1795	Hydrothermal Technologies for the Production of Fuels and Chemicals from Biomass. 2012 , 291-342		
1794	Production of high quality fuels from lignocellulose-derived chemicals: a convenient C–C bond formation of furfural, 5-methylfurfural and aromatic aldehyde. 2012 , 2, 11211		60
1793	Highly efficient hydrogenation of biomass-derived levulinic acid to γ -valerolactone catalyzed by iridium pincer complexes. <i>Green Chemistry</i> , 2012 , 14, 2388	10	137
1792	Efficient conversion of microcrystalline cellulose to 1,2-alkanediols over supported Ni catalysts. <i>Green Chemistry</i> , 2012 , 14, 758	10	107
1791	Chemical characterization and water content determination of bio-oils obtained from various biomass species using 31P NMR spectroscopy. 2012 , 3, 123-128		21
1790	Dehydration of Glucose to 5-(Hydroxymethyl)furfural and Anhydroglucose: Thermodynamic Insights. 2012 , 116, 5116-5120		33
1789	Synthesis of renewable plasticizer alcohols by formal anti-Markovnikov hydration of terminal branched chain alkenes via a borane-free oxidation/reduction sequence. <i>Green Chemistry</i> , 2012 , 14, 2450 ¹⁰		16
1788	Biorefinery with Ionic Liquids. 2012 , 75-133		4
1787	Delignification of Miscanthus by Extraction. 2012 , 47, 370-376		6
1786	Production of value-added chemicals from bio-oil via acid catalysis coupled with liquid–liquid extraction. 2012 , 2, 9366		47
1785	Hydro-Pyrolysis of Biomass and Online Catalytic Vapor Upgrading with Ni-ZSM-5 and Ni-MCM-41. 2012 , 26, 6080-6090		111
1784	Optimizing Catalytic Fast Pyrolysis of Biomass for Hydrocarbon Yield. 2012 , 55, 1879-1885		6
1783	Polyoxometalates as efficient catalysts for transformations of cellulose into platform chemicals. 2012 , 41, 9817-31		127
1782	Etherification and reductive etherification of 5-(hydroxymethyl)furfural: 5-(alkoxymethyl)furfurals and 2,5-bis(alkoxymethyl)furans as potential bio-diesel candidates. <i>Green Chemistry</i> , 2012 , 14, 1626	10	284
1781	Heterogeneous Bifunctional Metal/Acid Catalysts for Selective Chemical Processes. 2012 , 2012, 3807-3823		57

1780	Renewable linear alpha olefins by selective ethenolysis of decarboxylated unsaturated fatty acids. 2012 , 114, 911-918	35
1779	Bimetallic catalysts for upgrading of biomass to fuels and chemicals. 2012 , 41, 8075-98	934
1778	Deoxygenation of Biomass-Derived Feedstocks: Oxorhenium-Catalyzed Deoxydehydration of Sugars and Sugar Alcohols. 2012 , 124, 8206-8210	73
1777	Deoxygenation of biomass-derived feedstocks: oxorhenium-catalyzed deoxydehydration of sugars and sugar alcohols. 2012 , 51, 8082-6	190
1776	Kinetics and reaction engineering of levulinic acid production from aqueous glucose solutions. 2012 , 5, 1280-90	149
1775	Electrochemical synthesis of adiponitrile from the renewable raw material glutamic acid. 2012 , 5, 617-20	43
1774	Tuning the acid/metal balance of carbon nanofiber-supported nickel catalysts for hydrolytic hydrogenation of cellulose. 2012 , 5, 1549-58	114
1773	Chemo-enzymatic conversion of glucose into 5-hydroxymethylfurfural in seawater. 2012 , 5, 1203-6	58
1772	Catalysis for Lignocellulosic Biomass Processing: Methodological Aspects. 2012 , 142, 676-689	8
1771	Catalysis for Lignocellulosic Biomass Processing: Methodological Aspects. 2012 , 142, 817-829	3
1770	Development of Bifunctional Catalysts for the Conversions of Cellulose or Cellobiose into Polyols and Organic Acids in Water. 2012 , 16, 91-105	30
1769	Zeolite-based materials for novel catalytic applications: Opportunities, perspectives and open problems. 2012 , 179, 2-15	247
1768	Catalytic conversion of lignocellulosic biomass to fuels: Process development and technoeconomic evaluation. 2012 , 67, 57-67	105
1767	Interactions between CeO ₂ and Ni P for enhancing coking and sulfur resistance in autothermal reforming of liquid hydrocarbons. 2012 , 96, 348-354	13
1766	Aqueous-phase furfural-acetone aldol condensation over basic mixed oxides. 2012 , 113-114, 201-211	155
1765	Promising results with YXY Diesel components in an ESC test cycle using a PACCAR Diesel engine. 2012 , 36, 151-159	52
1764	Selection, breeding and engineering of microalgae for bioenergy and biofuel production. 2012 , 30, 198-205	225
1763	Conceptual net energy output for biofuel production from lignocellulosic biomass through biorefining. 2012 , 38, 583-598	120

1762	Renewable platform-chemicals and materials: Thermochemical study of levulinic acid. 2012 , 46, 94-98	18
1761	Aqueous-Phase Hydrogenolysis of Glycerol to 1,3-propanediol Over Pt-H4SiW12O40/SiO2. 2012 , 142, 267-274	68
1760	Selective production of green light olefins by catalytic conversion of bio-oil with Mg/HZSM-5 catalyst. 2013 , 88, 109-118	31
1759	Etherification of 5-Hydroxymethylfurfural to a Biodiesel Component Over Ionic Liquid Modified Zeolites. 2013 , 56, 765-769	19
1758	Superhydrophilic mesoporous sulfonated melamine-formaldehyde resin supported palladium nanoparticles as an efficient catalyst for biofuel upgrade. 2013 , 1, 8630	50
1757	Direct conversion of fructose-based carbohydrates to 5-ethoxymethylfurfural catalyzed by AlCl3·6H2O/BF3·(Et)2O in ethanol. 2013 , 22, 93-97	32
1756	Synthesis of Valerolactone using a continuous-flow reactor. 2013 , 3, 16283	54
1755	Integrating White Biotechnology in Lignocellulosic Biomass Transformations: From Enzyme-Catalysis to Metabolic Engineering. 2013 , 445-466	3
1754	Green carbon science: scientific basis for integrating carbon resource processing, utilization, and recycling. 2013 , 52, 9620-33	580
1753	Current Catalytic Processes for Biomass Conversion. 2013 , 29-52	5
1752	Catalysts for Biomass Conversion. 2013 , 371-389	
1751	Mesoporous molecular sieves K2O/Ba(Ca or Mg)-MCM-41 with base sites as heterogeneous catalysts for the production of liquid hydrocarbon fuel from catalytic cracking of rubber seed oil. <i>Green Chemistry</i> , 2013 , 15, 2573	10 15
1750	Enhanced Oxidation Kinetics in Thermochemical Cycling of CeO2 through Templated Porosity. 2013 , 117, 1692-1700	64
1749	Effects of lignin on the ionic-liquid assisted catalytic hydrolysis of cellulose: chemical inhibition by lignin. 2013 , 20, 2349-2358	9
1748	Vanadium-catalyzed deoxydehydration of glycols. 2013 , 49, 8199-201	71
1747	Catalytic deoxydehydration of glycols with alcohol reductants. 2013 , 6, 597-9	73
1746	The influence of hydrophobic/hydrophilic balance of the mesoporous solid acid catalysts in the selective dehydration of fructose into HMF. 2013 , 3, 20655	43
1745	Mechanical depolymerisation of acidulated cellulose: understanding the solubility of high molecular weight oligomers. <i>Green Chemistry</i> , 2013 , 15, 2761	10 92

1744	The damaging effects of short chain fatty acids on Escherichia coli membranes. 2013 , 97, 8317-27		139
1743	Decomposition of Ethanol Over Ru(0001): A DFT Study. 2013 , 56, 874-884		30
1742	Catalytic conversion of biomass-derived levulinic acid to valerate esters as oxygenated fuels using supported ruthenium catalysts. <i>Green Chemistry</i> , 2013 , 15, 2967	10	100
1741	Highly efficient and robust Au/MgCuCr2O4 catalyst for gas-phase oxidation of ethanol to acetaldehyde. 2013 , 135, 14032-5		329
1740	Catalysis in Biomass Processing. 2013 , 559-586		6
1739	Effects of solvents and catalysts in liquefaction of pinewood sawdust for the production of bio-oils. 2013 , 59, 158-167		104
1738	Effectiveness of xylose utilization for high yield production of lactate-enriched P(lactate-co-3-hydroxybutyrate) using a lactate-overproducing strain of Escherichia coli and an evolved lactate-polymerizing enzyme. 2013 , 15, 159-66		46
1737	Efficient separation and physico-chemical characterization of lignin from eucalyptus using ionic liquid-organic solvent and alkaline ethanol solvent. 2013 , 47, 277-285		42
1736	Applications of process synthesis: Moving from conventional chemical processes towards biorefinery processes. 2013 , 49, 217-229		54
1735	Ruthenium nanoparticles supported on zeolite Y as an efficient catalyst for selective hydrogenation of xylose to xylitol. 2013 , 376, 63-70		75
1734	Modeling aqueous-phase hydrodeoxygenation of sorbitol over Pt/SiO2-Al2O3. 2013 , 3, 23769		29
1733	Synthesis of pyruvic acid by vapour phase catalytic oxidative dehydrogenation of lactic acid. 2013 , 377, 123-128		31
1732	Chemical conversion of biomass-derived hexose sugars to levulinic acid over sulfonic acid-functionalized graphene oxide catalysts. <i>Green Chemistry</i> , 2013 , 15, 2935	10	163
1731	Aerobic Oxidation of β -1 Lignin Model Compounds with Copper and Oxovanadium Catalysts. 2013 , 3, 3111-3122		87
1730	Conversion of furfuryl alcohol to ethyl levulinate using porous aluminosilicate acid catalysts. 2013 , 218-219, 76-84		101
1729	Using Bio-oil Produced by Biomass Pyrolysis as Diesel Fuel. 2013 , 27, 6831-6838		16
1728	Di- and triheteroarylalkanes via self-condensation and intramolecular Friedel-Crafts type reaction of heteroaryl alcohols. 2013 , 11, 8030-5		27
1727	Sodium ion interactions with aqueous glucose: insights from quantum mechanics, molecular dynamics, and experiment. 2014 , 118, 1990-2000		42

1726	Molecular characterization of nitrogen-containing species in switchgrass bio-oils at various harvest times. 2013 , 111, 718-726		30
1725	Highly selective production of value-added γ -valerolactone from biomass-derived levulinic acid using the robust Pd nanoparticles. 2013 , 468, 52-58		103
1724	Green Carbon. 2013 , 1-36		
1723	Valorization of humin-based byproducts from biomass processing-a route to sustainable hydrogen. 2013 , 6, 1651-8		72
1722	Ketonization of Carboxylic Acids: Mechanisms, Catalysts, and Implications for Biomass Conversion. 2013 , 3, 2456-2473		290
1721	Characteristics and origin of char and coke from fast and slow, catalytic and thermal pyrolysis of biomass and relevant model compounds. <i>Green Chemistry</i> , 2013 , 15, 3214	10	100
1720	Designing Porous Inorganic Architectures. 2013 , 193-240		1
1719	Hemicellulose hydrolysis catalysed by solid acids. 2013 , 3, 2057		70
1718	Revisiting the Brønsted acid catalysed hydrolysis kinetics of polymeric carbohydrates in ionic liquids by in situ ATR-FTIR spectroscopy. <i>Green Chemistry</i> , 2013 , 15, 2843	10	26
1717	Liquid Hydrocarbon Fuels from Catalytic Cracking of Waste Cooking Oils Using Basic Mesoporous Molecular Sieves K2O/Ba-MCM-41 as Catalysts. 2013 , 1, 1412-1416		30
1716	Gamma-valerolactone, a sustainable platform molecule derived from lignocellulosic biomass. <i>Green Chemistry</i> , 2013 , 15, 584	10	732
1715	Set of Acidic Resin Catalysts To Correlate Structure and Reactivity in Fructose Conversion to 5-Hydroxymethylfurfural. 2013 , 3, 123-127		49
1714	Investigations of novel nitrile-based ionic liquids as pre-treatment solvent for extraction of lignin from bamboo biomass. 2013 , 19, 207-214		52
1713	A kinetic study of acid catalysed hydrolysis of sugar cane bagasse to levulinic acid. 2013 , 217, 61-70		132
1712	Chromium(0) nanoparticles as effective catalyst for the conversion of glucose into 5-hydroxymethylfurfural. 2013 , 6, 61-4		55
1711	Bio-oils Upgrading for Second Generation Biofuels. 2013 , 52, 275-287		151
1710	Chemical Reaction Engineering of Biomass Conversion. 2013 , 42, 195-260		1
1709	Production and upgrading of 5-hydroxymethylfurfural using heterogeneous catalysts and biomass-derived solvents. <i>Green Chemistry</i> , 2013 , 15, 85-90	10	267

1708	Hydroxymethylfurfural, a versatile platform chemical made from renewable resources. 2013 , 113, 1499-597	1935
1707	Conversion of Hemicellulose into Furfural Using Solid Acid Catalysts in γ -Valerolactone. 2013 , 125, 1308-1312	42
1706	Conversion of hemicellulose into furfural using solid acid catalysts in γ -Valerolactone. 2013 , 52, 1270-4	343
1705	Ketonic decarboxylation reaction mechanism: a combined experimental and DFT study. 2013 , 6, 141-51	105
1704	Conversion of (ligno)cellulose feeds to isosorbide with heteropoly acids and Ru on carbon. 2013 , 6, 199-208	96
1703	Textural and fuel characteristics of the chars produced by the pyrolysis of waste wood, and the properties of activated carbons prepared from them. 2013 , 104, 551-558	53
1702	Activated carbon-supported ruthenium as an efficient catalyst for selective aerobic oxidation of 5-hydroxymethylfurfural to 2,5-diiformylfuran. 2013 , 34, 871-875	40
1701	Production of aromatics through current-enhanced catalytic conversion of bio-oil tar. 2013 , 136, 222-9	36
1700	Synthetic biology strategies for synthesizing polyhydroxyalkanoates from unrelated carbon sources. 2013 , 103, 58-67	39
1699	Improving the conversion of biomass in catalytic fast pyrolysis via white-rot fungal pretreatment. 2013 , 134, 198-203	59
1698	Mechanism of Sulfite-Driven, MeReO_3 -Catalyzed Deoxydehydration of Glycols. 2013 , 32, 1821-1831	39
1697	Catalytic deoxydehydration of diols to olefins by using a bulky cyclopentadiene-based trioxorhenium catalyst. 2013 , 6, 1673-80	56
1696	Sulfonated hierarchical H-USY zeolite for efficient hydrolysis of hemicellulose/cellulose. 2013 , 98, 146-51	64
1695	Microwave-assisted conversion of carbohydrates to levulinic acid: an essential step in biomass conversion. <i>Green Chemistry</i> , 2013 , 15, 439-445	10 158
1694	Direct conversion of cellulose to levulinic acid and gamma-valerolactone using solid acid catalysts. 2013 , 3, 927-931	182
1693	Efficient aerobic oxidation of 5-hydroxymethylfurfural to 2,5-diiformylfuran on supported Ru catalysts. 2013 , 301, 83-91	157
1692	Insights into the interplay of Lewis and Brønsted acid catalysts in glucose and fructose conversion to 5-(hydroxymethyl)furfural and levulinic acid in aqueous media. 2013 , 135, 3997-4006	496
1691	Pd-Catalyzed Transfer Hydrogenolysis of Primary, Secondary, and Tertiary Benzylic Alcohols by Formic Acid: A Mechanistic Study. 2013 , 3, 635-642	82

1690	Hydrolysis of cellulose to glucose by solid acid catalysts. <i>Green Chemistry</i> , 2013 , 15, 1095	10	478
1689	Molecular Chemistry to the Fore: New Insights into the Fascinating World of Photoactive Colloidal Semiconductor Nanocrystals. 2013 , 4, 653-68		29
1688	The dehydration of fructose to 5-hydroxymethylfurfural efficiently catalyzed by acidic ion-exchange resin in ionic liquid. 2013 , 133, 347-53		96
1687	Acid-catalyzed conversion of mono- and poly-sugars into platform chemicals: effects of molecular structure of sugar substrate. 2013 , 133, 469-74		52
1686	Hydrogenation of levulinic acid to γ -valerolactone using ruthenium nanoparticles. 2013 , 397, 124-128		70
1685	Production of hybrid diesel fuel precursors from carbohydrates and petrochemicals using formic acid as a reactive solvent. 2013 , 6, 383-8		35
1684	High-Yielding One-Pot Synthesis of Glucose from Cellulose Using Simple Activated Carbons and Trace Hydrochloric Acid. 2013 , 3, 581-587		176
1683	One-step synthesis of mesoporous H ₄ SiW ₁₂ O ₄₀ -SiO ₂ catalysts for the production of methyl and ethyl levulinate biodiesel. 2013 , 34, 58-63		118
1682	Rice husk-derived carbon anodes for lithium ion batteries. 2013 , 1, 5269		230
1681	Sulfonated surfactants obtained from furfural. <i>Green Chemistry</i> , 2013 , 15, 1558	10	13
1680	N-terminal PEGylated cellulase: a high stability enzyme in 1-butyl-3-methylimidazolium chloride. <i>Green Chemistry</i> , 2013 , 15, 1624	10	18
1679	Catalytic Strategies for Converting Lignocellulosic Carbohydrates to Fuels and Chemicals. 2013 , 61-102		6
1678	Production of Aromatic Chemicals from Biobased Feedstock. 2013 , 183-237		4
1677	Role of Acid Catalysis in the Conversion of Lignocellulosic Biomass to Fuels and Chemicals. 2013 , 261-288		8
1676	Aqueous-phase hydrodeoxygenation of sorbitol: A comparative study of Pt/Zr phosphate and PtReOx/C. 2013 , 304, 72-85		108
1675	Design of Heterogeneous Catalysts for Fuels and Chemicals Processing: An Overview. 2013 , 3-68		30
1674	Catalytic upgrading of the light fraction of a simulated bio-oil over CeZrOx catalyst. 2013 , 142-143, 368-376		50
1673	Microbial production of fatty acid-derived fuels and chemicals. 2013 , 24, 1044-53		144

1672	Multiphase Catalytic Hydrogenolysis/Hydrodeoxygenation Processes for Chemicals from Renewable Feedstocks: Kinetics, Mechanism, and Reaction Engineering. 2013 , 52, 15226-15243		33
1671	Hydrolysis of hemicellulose catalyzed by hierarchical H-USY zeolites [The role of acidity and pore structure. 2013 , 169, 54-59		60
1670	Mechanism of MTO-Catalyzed Deoxydehydration of Diols to Alkenes Using Sacrificial Alcohols. 2013 , 32, 3210-3219		58
1669	GC-PPC-SAFT Equation of State for VLE and LLE of Hydrocarbons and Oxygenated Compounds. Sensitivity Analysis. 2013 , 52, 7014-7029		20
1668	The electrocatalytic hydrogenation of furanic compounds in a continuous electrocatalytic membrane reactor. <i>Green Chemistry</i> , 2013 , 15, 1869	10	83
1667	Role of N-heterocyclic carbenes in glucose conversion into HMF by Cr catalysts in ionic liquids. 2013 , 460-461, 1-7		19
1666	The Role of Heterogeneous Catalysis in the Biorefinery of the Future. 2013 , 557-576		5
1665	Potential sources of high value chemicals from leaves, stems and flowers of <i>Miscanthus sinensis</i> 'Goliath' and <i>Miscanthus sacchariflorus</i> . 2013 , 92, 160-7		16
1664	Renewable biofuel additives from the ozonolysis of lignin. 2013 , 143, 549-54		28
1663	Nanocatalysis for Fuel Production. 2013 , 407-471		
1662	Selective Deoxygenation of Aldehydes: The Reaction of Acetaldehyde and Glycolaldehyde on Zn/Pt(111) Bimetallic Surfaces. 2013 , 3, 1739-1750		26
1661	Biomass Sources for Hydrogen Production. 2013 , 87-110		6
1660	Synthesis of renewable diesel with hydroxyacetone and 2-methyl-furan. 2013 , 49, 5727-9		102
1659	Effect of Gas Atmosphere on Catalytic Behaviour of Zirconia, Ceria and Ceria/Zirconia Catalysts in Valeric Acid Ketonization. 2013 , 56, 846-855		35
1658	Synthesis and utilisation of sugar compounds derived from lignocellulosic biomass. <i>Green Chemistry</i> , 2013 , 15, 1740	10	363
1657	Polymeric ionic liquid (PIL)-supported recyclable catalysts for biomass conversion into HMF. 2013 , 48, 181-190		27
1656	One-pot reduction of olefin and ketone moieties by a copper-phosphine catalyst enabled by polar aprotic solvents. 2013 , 3, 1240		7
1655	Solvent-free synthesis of C10 and C11 branched alkanes from furfural and methyl isobutyl ketone. 2013 , 6, 1149-52		91

1654	Conversion of carbohydrate biomass to γ -valerolactone by using water-soluble and reusable iridium complexes in acidic aqueous media. 2013 , 6, 1163-7	100
1653	Conversion of glucose into levulinic acid with solid metal(IV) phosphate catalysts. 2013 , 304, 123-134	161
1652	Potential renewable oxygenated biofuels for the aviation and road transport sectors. 2013 , 103, 593-599	82
1651	Synthesis, characterization, and cure chemistry of renewable bis(cyanate) esters derived from 2-methoxy-4-methylphenol. 2013 , 14, 771-80	75
1650	Site-specific imaging of elemental steps in dehydration of diols on TiO ₂ (110). 2013 , 7, 10414-23	19
1649	Rigid Biobased Building Blocks. 2013 , 1, 61-72	40
1648	Diesel and alkane fuels from biomass by organocatalysis and metal-acid tandem catalysis. 2013 , 6, 2236-9	83
1647	Density Functional Theory and Reaction Kinetics Studies of the Water-Gas Shift Reaction on Pt/Re Catalysts. 2013 , 5, 3690-3699	25
1646	Trimethylenemethane-Ruthenium(II)-Triphos Complexes as Highly Active Catalysts for Catalytic C-O Bond Cleavage Reactions of Lignin Model Compounds. 2013 , 5, 439-441	81
1645	Recent Progress in Advanced Nanobiological Materials for Energy and Environmental Applications. 2013 , 6, 5821-5856	12
1644	Größe Kohlenstoffwissenschaft: eine wissenschaftliche Grundlage für das Verknüpfen von Verarbeitung, Nutzung und Recycling der Kohlenstoffressourcen. 2013 , 125, 9798-9812	106
1643	Selective Pyrolysis Behaviors of Willow Catalyzed via Phosphoric Acid. 2013 , 724-725, 413-418	0
1642	Transformation of Bio-oil into BTX by Bio-oil Catalytic Cracking. 2013 , 26, 477-483	15
1641	Production of Low-carbon Light Olefins from Catalytic Cracking of Crude Bio-oil. 2013 , 26, 237-244	6
1640	Green Carbon Nanomaterials. 2013 , 7-58	
1639	Conversion of Glucose to 5-Hydroxymethylfurfural Catalyzed by Metal Halide in N,N-Dimethylacetamide. 2013 , 8,	4
1638	Analysis of Juice Yield, Sugar Content, and Biomass Accumulation in Sorghum. 2013 , 53, 1288-1297	21
1637	Catalytic Role of Ionic Liquids for Dissolution and Degradation of Biomacromolecules. 2013 , 9,	10

1636	High Quality Bio-Oil Production via Catalytic Pyrolysis of Pine Sawdust. 2013 , 8,	5
1635	Biological feedstocks for biofuels. 2013 , 116-130	1
1634	Optimization of Oil Palm Fronds Pretreatment Using Ionic Liquid for Levulinic Acid Production. 2014 , 71,	2
1633	Aerobic Selective Oxidation of Biomass-derived 5-Hydroxymethylfurfural to 2,5-Diformylfuran with Active Manganese Dioxide Catalyst. 2014 , 9,	8
1632	Transformation of Biomass into Aromatics with Zeolite Catalysts. 2014 , 27, 361-367	6
1631	Effects of surface activation on the structural and catalytic properties of ruthenium nanoparticles supported on mesoporous silica. 2014 , 25, 045701	7
1630	Ruthenium catalyzed ethenolysis of renewable oleonitrile. 2014 , 116, 1583-1589	19
1629	Lignocellulose-Based Chemical Products. 2014 , 277-313	29
1628	Upgrading oxygenated Fischer-Tropsch derivatives and one-step direct synthesis of ethyl acetate from ethanol - examples of the desirability of research on simple chemical compounds transformations. 2014 , 8, 77	3
1627	Chemistry of Biofuels and Biofuel Additives from Biomass. 2014 , 547-570	
1626	Rapid and efficient functionalized ionic liquid-catalyzed aldol condensation reactions associated with microwave irradiation. 2014 , 15, 1284-99	21
1625	Production of BTX through Catalytic Depolymerization of Lignin. 2014 , 27, 221-226	14
1624	From furfural to fuel: synthesis of furoins by organocatalysis and their hydrodeoxygenation by cascade catalysis. 2014 , 7, 2742-7	54
1623	Comparison of cellobiose and glucose transformation to ethylene glycol. 2014 , 35, 1811-1817	17
1622	Catalytic dehydration of fructose to 5-hydroxymethylfurfural over a mesoscopically assembled sulfated zirconia nanoparticle catalyst in organic solvent. 2014 , 4, 57164-57172	13
1621	Selective hydrogenation of furan-containing condensation products as a source of biomass-derived diesel additives. 2014 , 7, 2796-800	36
1620	Efficient Conversion of Levulinic Acid into Valerolactone over Raney Ni Catalyst Prepared from Melt-quenching Alloy. 2014 , 144, 1766-1771	19
1619	Combined experimental and computational studies on the physical and chemical properties of the renewable amide, 3-acetamido-5-acetylfuran. 2014 , 15, 4087-94	18

1618	Heterogeneous acidic TiO ₂ nanoparticles for efficient conversion of biomass derived carbohydrates. <i>Green Chemistry</i> , 2014 , 16, 785	10	115
1617	Catalytic pyrolysis of individual components of lignocellulosic biomass. <i>Green Chemistry</i> , 2014 , 16, 727-735		354
1616	A novel approach to enhance the activity of H-form zeolite catalyst for production of hydroxymethylfurfural from cellulose. 2014 , 20, 1952-1957		28
1615	The structural features of hemicelluloses dissolved out at different cooking stages of active oxygen cooking process. 2014 , 104, 182-90		5
1614	Liquid hydrocarbon fuels from catalytic cracking of rubber seed oil using USY as catalyst. 2014 , 123, 189-193		52
1613	Fabrication of hierarchically ordered porous carbons using sugarcane bagasse as the scaffold for supercapacitor applications. 2014 , 194, 29-37		17
1612	Hydrodeoxygenation of mono- and dimeric lignin model compounds on noble metal catalysts. 2014 , 233, 83-91		145
1611	Pt-Re synergy in aqueous-phase reforming of glycerol and the water-gas shift reaction. 2014 , 311, 88-101		84
1610	Catalytic conversion of fructose into furans using FeCl ₃ as catalyst. 2014 , 20, 644-649		41
1609	Green Plasticizers from Liquefied Wood. 2014 , 5, 651-659		13
1608	Production of H ₂ by Ethanol Photoreforming on Au/TiO ₂ . 2014 , 24, 241-248		87
1607	Bio(chemo)technological strategies for biomass conversion into bioethanol and key carboxylic acids. <i>Green Chemistry</i> , 2014 , 16, 2386	10	52
1606	Direct thermocatalytic transformation of pine wood into low oxygenated biofuel. <i>Green Chemistry</i> , 2014 , 16, 3031-3038	10	7
1605	Biomass conversion to hydrocarbon fuels using the MixAlcohol process at a pilot-plant scale. 2014 , 62, 138-148		22
1604	Synthesis of diesel range alkanes with 2-methylfuran and mesityl oxide from lignocellulose. 2014 , 234, 91-99		35
1603	Sulfonated graphene oxide as effective catalyst for conversion of 5-(hydroxymethyl)-2-furfural into biofuels. 2014 , 7, 804-12		75
1602	A synergistic effect of microwave/ultrasound and symmetrical acidic ionic liquids on transesterification of vegetable oils with high free fatty acid. 2014 , 4, 301-309		5
1601	Control of selectivity, activity and durability of simple supported nickel catalysts for hydrolytic hydrogenation of cellulose. <i>Green Chemistry</i> , 2014 , 16, 637-644	10	59

1600	Structural features and antioxidant activities of degraded lignins from steam exploded bamboo stem. 2014 , 56, 128-136	71
1599	Glucose dehydration to 5-hydroxymethylfurfural on zirconium containing mesoporous MCM-41 silica catalysts. 2014 , 118, 265-271	70
1598	Fast hemicellulose quantification via a simple one-step acid hydrolysis. 2014 , 111, 1088-96	29
1597	Formic acid decomposition on Au catalysts: DFT, microkinetic modeling, and reaction kinetics experiments. 2014 , 60, 1303-1319	78
1596	Selective hydrogenation of d-glucose to d-sorbitol over HY zeolite supported ruthenium nanoparticles catalysts. 2014 , 232, 99-107	56
1595	Ionic liquid-based green processes for energy production. 2014 , 43, 7838-69	326
1594	Effects of the precipitation agents and rare earth additives on the structure and catalytic performance in glycerol hydrogenolysis of Cu/SiO ₂ catalysts prepared by precipitation-gel method. 2014 , 234, 223-232	27
1593	Prospectives for bio-oil upgrading via esterification over zeolite catalysts. 2014 , 235, 176-183	73
1592	Fe ₃ O ₄ @SiO ₂ /TEMPO as a Magnetically Recyclable Catalyst for Highly Selective Aerobic Oxidation of 5-Hydroxymethylfurfural into 2,5-Diformylfuran under Metal- and Halogen-Free Conditions. 2014 , 6, 758-762	54
1591	Application of Hydrothermal Reactions to Biomass Conversion. 2014 ,	20
1590	Reaction kinetics and mechanism of ketonization of aliphatic carboxylic acids with different carbon chain lengths over Ru/TiO ₂ catalyst. 2014 , 314, 149-158	64
1589	Alkaline Pretreatment of Corn Stover: Bench-Scale Fractionation and Stream Characterization. 2014 , 2, 1481-1491	92
1588	Hydrodeoxygenation of the angelica lactone dimer, a cellulose-based feedstock: simple, high-yield synthesis of branched C ₇ -C ₁₀ gasoline-like hydrocarbons. 2014 , 53, 1854-7	155
1587	Selective hydrogenolysis of xylitol to ethylene glycol and propylene glycol over copper catalysts. 2014 , 147, 377-386	63
1586	Heterogeneous Catalysis by Metals. 2014 , 1-16	8
1585	Top chemical opportunities from carbohydrate biomass: a chemist's view of the Biorefinery. 2014 , 353, 1-40	103
1584	Aqueous phase hydrogenation of levulinic acid to 1,4-pentanediol. 2014 , 50, 1414-6	109
1583	Syntheses of biodiesel precursors: sulfonic acid catalysts for condensation of biomass-derived platform molecules. 2014 , 7, 1078-85	49

1582	Structural and catalytic differences in the effect of Co and Mo as promoters for Pt-based aqueous phase reforming catalysts. 2014 , 156-157, 236-248		30
1581	Selective hydrogenation of biomass-derived 5-hydroxymethylfurfural (HMF) to 2,5-dimethylfuran (DMF) under atmospheric hydrogen pressure over carbon supported PdAu bimetallic catalyst. 2014 , 232, 89-98		180
1580	The AlphaBet(a) of Glucose Pyrolysis: Computational and Experimental Investigations of 5-Hydroxymethylfurfural and Levoglucosan Formation Reveal Implications for Cellulose Pyrolysis. 2014 , 2, 1461-1473		92
1579	Enhanced conversion of carbohydrates to the platform chemical 5-hydroxymethylfurfural using designer ionic liquids. 2014 , 7, 1647-54		60
1578	Enhancing liquid hot water (LHW) pretreatment of sugarcane bagasse by high pressure carbon dioxide (HP-CO ₂). 2014 , 57, 141-149		45
1577	Direct hydro-liquefaction of sawdust in petroleum ether and comprehensive bio-oil products analysis. 2014 , 155, 152-60		16
1576	One-Pot Hydrothermal Conversion of Cellulose into Organic Acids with CuO as an Oxidant. 2014 , 53, 7939-7946		23
1575	Catalytic conversion of nonfood woody biomass solids to organic liquids. 2014 , 47, 1503-12		248
1574	DRIFTS and UV-Vis DRS study of valeric acid ketonization mechanism over ZrO ₂ in hydrogen atmosphere. 2014 , 388-389, 133-140		21
1573	Rapid ether and alcohol C-O bond hydrogenolysis catalyzed by tandem high-valent metal triflate + supported Pd catalysts. 2014 , 136, 104-7		97
1572	Efficient and selective alcoholysis of furfuryl alcohol to alkyl levulinates catalyzed by double SO ₃ H-functionalized ionic liquids. <i>Green Chemistry</i> , 2014 , 16, 1436-1443	10	106
1571	Recent advances in heterogeneous catalysts for bio-oil upgrading via <i>in situ</i> catalytic fast pyrolysis—catalyst development through the study of model compounds. <i>Green Chemistry</i> , 2014 , 16, 454-490	10	356
1570	Spectroscopic and electrochemical characterization of heteropoly acids for their optimized application in selective biomass oxidation to formic acid. <i>Green Chemistry</i> , 2014 , 16, 226-237	10	85
1569	High-pressure fast-pyrolysis, fast-hydropyrolysis and catalytic hydrodeoxygenation of cellulose: production of liquid fuel from biomass. <i>Green Chemistry</i> , 2014 , 16, 792	10	85
1568	A strategy for the simultaneous catalytic conversion of hemicellulose and cellulose from lignocellulosic biomass to liquid transportation fuels. <i>Green Chemistry</i> , 2014 , 16, 653-661	10	109
1567	Dehydration of d-xylose to furfural using different supported niobia catalysts. 2014 , 152-153, 1-10		54
1566	Green oxidation of fatty alcohols: Challenges and opportunities. 2014 , 474, 211-223		48
1565	Evaluating strategies for catalytic upgrading of pyrolysis oil in liquid phase. 2014 , 145, 10-23		134

1564	Hydrogenation of levulinic acid and γ -valerolactone: steps towards biofuels. 2014 , 4, 293-299		14
1563	Dealuminated Beta zeolite as effective bifunctional catalyst for direct transformation of glucose to 5-hydroxymethylfurfural. 2014 , 470, 318-326		115
1562	Synthesis of renewable diesel range alkanes by hydrodeoxygenation of furans over Ni/H ₂ under mild conditions. <i>Green Chemistry</i> , 2014 , 16, 594-599	10	67
1561	Formation of uniform colloidal spheres from lignin, a renewable resource recovered from pulping spent liquor. <i>Green Chemistry</i> , 2014 , 16, 2156	10	249
1560	Studies on co-cracking of jatropha oil with bagasse to obtain liquid, gaseous product and char. 2014 , 63, 308-316		18
1559	Hydrodeoxygenation of methyl palmitate over sulfided Mo/Al ₂ O ₃ , CoMo/Al ₂ O ₃ and NiMo/Al ₂ O ₃ catalysts. 2014 , 4, 2242-2250		47
1558	Heterogeneous Catalysis for Tandem Reactions. 2014 , 4, 870-891		250
1557	Direct Liquefaction of Biomass in a 1-(4-Sulfobutyl)-3-methylimidazolium Hydrosulfate Ionic Liquid/1-Octanol Catalytic System. 2014 , 28, 1139-1146		8
1556	Effect of Co Loading on the Activity and Selectivity of PtCo Aqueous Phase Reforming Catalysts. 2014 , 4, 480-491		32
1555	High activity redox catalysts synthesized by chemical vapor impregnation. 2014 , 8, 957-69		23
1554	Catalytic fast pyrolysis of biomass with mesoporous ZSM-5 zeolites prepared by desilication with NaOH solutions. 2014 , 470, 115-122		216
1553	Selective conversion of microcrystalline cellulose into hexitols over a Ru/[Bmim]3PW12O ₄₀ catalyst under mild conditions. 2014 , 233, 70-76		27
1552	Conversion of biomass platform molecules into fuel additives and liquid hydrocarbon fuels. <i>Green Chemistry</i> , 2014 , 16, 516	10	983
1551	Organocatalysis in biorefining for biomass conversion and upgrading. <i>Green Chemistry</i> , 2014 , 16, 964-981	10	77
1550	Catalytic transfer hydrogenation of levulinate esters to γ -valerolactone over supported ruthenium hydroxide catalysts. 2014 , 4, 45848-45855		50
1549	Direct hydrogenation of biomass-derived butyric acid to n-butanol over a ruthenium-tin bimetallic catalyst. 2014 , 7, 2998-3001		34
1548	Entropically favored adsorption of cellulosic molecules onto carbon materials through hydrophobic functionalities. 2014 , 7, 1443-50		78
1547	Hydrodeoxygenation of 2,5-Hexanedione and 2,5-Dimethylfuran by Water-, Air-, and Acid-Stable Homogeneous Ruthenium and Iridium Catalysts. 2014 , 4, 4116-4128		32

1546	Synthesis of renewable high-density fuels using cyclopentanone derived from lignocellulose. 2014 , 50, 2572-4		121
1545	One-step production of long-chain hydrocarbons from waste-biomass-derived chemicals using bi-functional heterogeneous catalysts. 2014 , 16, 3047-54		29
1544	One-pot transformation of polysaccharides via multi-catalytic processes. 2014 , 4, 4138-4168		61
1543	Targeted chemical upgrading of lignocellulosic biomass to platform molecules. <i>Green Chemistry</i> , 2014 , 16, 4816-4838	10	330
1542	One-pot aldol condensation and hydrodeoxygenation of biomass-derived carbonyl compounds for biodiesel synthesis. 2014 , 7, 2816-20		53
1541	Quantitative evaluation of ball-milling effects on the hydrolysis of cellulose catalysed by activated carbon. 2014 , 4, 2312-2317		77
1540	Effect of Fe/Fe ₂ O ₃ loading on the catalytic activity of sulfonated single-walled carbon nanohorns for the esterification of palmitic acid. <i>Green Chemistry</i> , 2014 , 16, 4936-4943	10	19
1539	Lignin valorization through integrated biological funneling and chemical catalysis. 2014 , 111, 12013-8		494
1538	Aqueous phase reforming of glycerol over Re-promoted Pt and Rh catalysts. <i>Green Chemistry</i> , 2014 , 16, 853-863	10	62
1537	Synthesis of biobased succinimide from glutamic acid via silver-catalyzed decarboxylation. 2014 , 4, 27541-27544		47
1536	Zirconium phosphate combined with Ru/C as a highly efficient catalyst for the direct transformation of cellulose to C ₆ alditols. <i>Green Chemistry</i> , 2014 , 16, 3305-3312	10	90
1535	Ni/H-ZSM-5 as a promising catalyst for vapour phase hydrogenation of levulinic acid at atmospheric pressure. 2014 , 4, 9660		95
1534	Exceptional control of carbon-supported transition metal nanoparticles using metal-organic frameworks. 2014 , 2, 14014		20
1533	Synthesis and evaluation of macroporous polymerized solid acid derived from Pickering HIPEs for catalyzing cellulose into 5-hydroxymethylfurfural in an ionic liquid. 2014 , 4, 43029-43038		25
1532	Bifunctional nanoparticle@ILP catalysts (NPs@SILP) for the selective deoxygenation of biomass substrates. 2014 , 5, 4895-4905		51
1531	Analysis of volatile organic compound mixtures using radio-frequency ionization/mass spectrometry. 2014 , 6, 4982		4
1530	Sonochemistry: what potential for conversion of lignocellulosic biomass into platform chemicals?. 2014 , 7, 2774-87		53
1529	A continuous flow strategy for the coupled transfer hydrogenation and etherification of 5-(hydroxymethyl)furfural using Lewis acid zeolites. 2014 , 7, 2255-65		151

1528	Production of renewable jet fuel range alkanes and commodity chemicals from integrated catalytic processing of biomass. 2014 , 7, 1500-1523		295
1527	Solid acids with SO ₃ H groups and tunable surface properties: versatile catalysts for biomass conversion. 2014 , 2, 11813-11824		85
1526	A Closed-Loop Process from Microwave-Assisted Hydrothermal Degradation of Starch to Utilization of the Obtained Degradation Products as Starch Plasticizers. 2014 , 2, 2172-2181		39
1525	Synthesis of Diesel or Jet Fuel Range Cycloalkanes with 2-Methylfuran and Cyclopentanone from Lignocellulose. 2014 , 28, 5112-5118		83
1524	Production of γ -Valerolactone from biomass-derived compounds using formic acid as a hydrogen source over supported metal catalysts in water solvent. 2014 , 4, 10525		93
1523	Analysis of Kinetics and Reaction Pathways in the Aqueous-Phase Hydrogenation of Levulinic Acid To Form γ -Valerolactone over Ru/C. 2014 , 4, 1171-1181		215
1522	Tungsten-Promoted Mesoporous Group 4 (Ti, Zr, and Hf) Transition-Metal Oxides for Room-Temperature Solvent-Free Acetalization and Ketalization Reactions. 2014 , 26, 2803-2813		41
1521	Enhancing the stability of copper chromite catalysts for the selective hydrogenation of furfural using ALD overcoating. 2014 , 317, 284-292		52
1520	Continuous production of sugars from pyrolysis of acid-infused lignocellulosic biomass. <i>Green Chemistry</i> , 2014 , 16, 4144-4155	10	90
1519	Catalytic Conversion of Biomass Derivates over Acid Dealuminated ZSM-5. 2014 , 53, 15871-15878		43
1518	The glycerol biorefinery: a purpose for Brazilian biodiesel production. 2014 , 1,		16
1517	Optimizing the distribution of aromatic products from catalytic fast pyrolysis of cellulose by ZSM-5 modification with boron and co-feeding of low-density polyethylene. 2014 , 487, 45-53		60
1516	Aqueous extract of <i>Balanites roxburghii</i> fruit: a green dispersant for C=C bond formation. 2014 , 4, 31177-31183	14	
1515	Bioenergy Research. 2014 , 23-47		27
1514	Role of water in metal catalyst performance for ketone hydrogenation: a joint experimental and theoretical study on levulinic acid conversion into γ -valerolactone. 2014 , 50, 12450-3		141
1513	Application of bio-oils from lignocellulosic biomass to transportation, heat and power generation—A review. 2014 , 40, 1108-1125		100
1512	Synergy between Lewis acid sites and hydroxyl groups for the isomerization of glucose to fructose over Sn-containing zeolites: a theoretical perspective. 2014 , 4, 2241-2250		101
1511	Synthesis of diesel and jet fuel range alkanes with furfural and ketones from lignocellulose under solvent free conditions. <i>Green Chemistry</i> , 2014 , 16, 4879-4884	10	89

1510	Hydrodeoxygenation of Guaiacol over MoO ₃ -NiO/Mesoporous Silicates: Effect of Incorporated Heteroatom. 2014 , 28, 2598-2607	45
1509	Enhanced stability of cobalt catalysts by atomic layer deposition for aqueous-phase reactions. 2014 , 7, 1657	99
1508	Copper Catalysts for Selective C-C Bond Cleavage of EO-4 Lignin Model Compounds. 2014 , 356, 3563-3574	67
1507	Ruthenium-Catalyzed Hydrogen Generation from Alcohols and Formic Acid, Including Ru-Pincer-Type Complexes. 2014 , 45-79	10
1506	Competing uses of biomass: Assessment and comparison of the performance of bio-based heat, power, fuels and materials. 2014 , 40, 964-998	109
1505	Optimization of the process of chemical hydrolysis of cellulose to glucose. 2014 , 21, 2397-2407	31
1504	Structure and properties of the regenerated cellulose membranes prepared from cellulose carbamate in NaOH/ZnO aqueous solution. 2014 , 21, 2819-2830	27
1503	ZrO ₂ -modified TiO ₂ nanorod composite: Hydrothermal synthesis, characterization and application in esterification of organic acid. 2014 , 145, 82-89	15
1502	Chemoselective Hydrogenation of Biomass-Derived 5-Hydroxymethylfurfural into the Liquid Biofuel 2,5-Dimethylfuran. 2014 , 53, 9969-9978	118
1501	Preparation of Activated Carbon and Silica Particles from Rice Straw. 2014 , 2, 726-734	43
1500	Kinetics and mechanism of m-cresol hydrodeoxygenation on a Pt/SiO ₂ catalyst. 2014 , 317, 22-29	128
1499	Value addition to lignocellulosics and biomass-derived sugars: An insight into solid acid-based catalytic methods. 2014 , 126, 373-385	12
1498	Catalytic processes and catalyst development in biorefining. 2014 , 152-198	15
1497	Mechanism of fast pyrolysis of lignin: studying model compounds. 2014 , 118, 8524-31	105
1496	Selective Catalysis for Renewable Feedstocks and Chemicals. 2014 ,	1
1495	Solvent-free γ -valerolactone hydrogenation to 2-methyltetrahydrofuran catalysed by Ru/C: a reaction network analysis. <i>Green Chemistry</i> , 2014 , 16, 1358-1364	10 105
1494	Kinetic study of retro-aldol condensation of glucose to glycolaldehyde with ammonium metatungstate as the catalyst. 2014 , 60, 3804-3813	58
1493	A PDMS membrane with high pervaporation performance for the separation of furfural and its potential in industrial application. <i>Green Chemistry</i> , 2014 , 16, 1262-1273	10 63

1492	Synthesis and Applications of Alkyl Levulinates. 2014 , 2, 1338-1352		289
1491	Catalytic hydrolysis of cellulose and oil palm biomass in ionic liquid to reducing sugar for levulinic acid production. 2014 , 128, 490-498		66
1490	Mesoporous carbon/silica solid acid catalysts for producing useful bio-products within the sugar-platform of biorefineries. <i>Green Chemistry</i> , 2014 , 16, 4292-4305	10	53
1489	Toward stable nickel catalysts for aqueous phase reforming of biomass-derived feedstock under reducing and alkaline conditions. 2014 , 319, 27-35		40
1488	Densification of biorefinery schemes by H-transfer with Raney Ni and 2-propanol: A case study of a potential avenue for valorization of alkyl levulinates to alkyl 5-hydroxypentanoates and 5-valerolactone. 2014 , 388-389, 106-115		45
1487	Levulinic acid hydrogenolysis on Al ₂ O ₃ -based Ni-Cu bimetallic catalysts. 2014 , 35, 656-662		50
1486	Electrocatalytic hydrogenation of furfural to furfuryl alcohol using platinum supported on activated carbon fibers. 2014 , 135, 139-146		63
1485	Solvation behaviour and partial molar properties of monosaccharides in aqueous protic ionic liquid solutions. 2014 , 71, 37-49		54
1484	Mesoporous tantalum oxide as catalyst for dehydration of glucose to 5-hydroxymethylfurfural. 2014 , 154-155, 190-196		66
1483	Adsorption and Reaction of Acetaldehyde on Shape-Controlled CeO ₂ Nanocrystals: Elucidation of Structure/Function Relationships. 2014 , 4, 2437-2448		111
1482	Investigation of thermochemistry associated with the carbon-carbon coupling reactions of furan and furfural using ab initio methods. 2014 , 118, 4392-404		6
1481	Upgrading of lignin-derived bio-oils by catalytic hydrodeoxygenation. 2014 , 7, 103-129		627
1480	Integrated Catalytic Process for Biomass Conversion and Upgrading to C12 Furoin and Alkane Fuel. 2014 , 4, 1302-1310		82
1479	One-pot sequential oxidation and aldol-condensation reactions of veratryl alcohol catalyzed by the Ru@ZIF-8 + CuO/basic ionic liquid system. <i>Green Chemistry</i> , 2014 , 16, 600-604	10	43
1478	Enhancing the production of renewable petrochemicals by co-feeding of biomass with plastics in catalytic fast pyrolysis with ZSM-5 zeolites. 2014 , 481, 173-182		122
1477	A novel platinum nanocatalyst for the oxidation of 5-Hydroxymethylfurfural into 2,5-Furandicarboxylic acid under mild conditions. 2014 , 315, 67-74		192
1476	Production of phenols from catalytic conversion of lignin over a tungsten phosphide catalyst. 2014 , 481, 64-70		46
1475	Directional synthesis of liquid higher olefins through catalytic transformation of bio-oil. 2014 , 89, 239-248		11

1474	Catalytic Conversion of Levulinic Acid and Its Esters to γ -Valerolactone over Silica-Supported Zirconia Catalysts. 2014 , 87, 1252-1254	20
1473	Hydrodeoxygenation of the Angelica Lactone Dimer, a Cellulose-Based Feedstock: Simple, High-Yield Synthesis of Branched C ₇ -C ₁₀ Gasoline-like Hydrocarbons. 2014 , 126, 1885-1888	33
1472	5. Design of catalytic micro trickle bed reactors. 2015 , 174-219	
1471	Catalytic Metal-/Bio-Composites for Fine Chemicals Derived from Biomass Production. 2015 , 313-352	
1470	An Overview of Reactor Designs for Biodiesel Production. 2015 , 239-258	
1469	Xylose isomerization with zeolites in a two-step alcohol-water process. 2015 , 8, 1088-94	31
1468	Synthesis of cyclic carbonates from epoxides and carbon dioxide by using organocatalysts. 2015 , 8, 2436-54	332
1467	Catalytic Upgrading of Biomass-Derived Methyl Ketones to Liquid Transportation Fuel Precursors by an Organocatalytic Approach. 2015 , 127, 4756-4760	9
1466	Synergistic Interaction within Bifunctional Ruthenium Nanoparticle/SILP Catalysts for the Selective Hydrodeoxygenation of Phenols. 2015 , 54, 15750-5	72
1465	Synergistic Interaction within Bifunctional Ruthenium Nanoparticle/SILP Catalysts for the Selective Hydrodeoxygenation of Phenols. 2015 , 127, 15976-15981	17
1464	EFFECTS OF FIVE DIVERSE LIGNOCELLULOSIC DIETS ON DIGESTIVE ENZYME BIOCHEMISTRY IN THE TERMITE <i>Reticulitermes flavipes</i> . 2015 , 90, 89-103	9
1463	Role of Exposed Surfaces on Zinc Oxide Nanostructures in the Catalytic Ethanol Transformation. 2015 , 8, 2223-30	14
1462	Catalytic Upgrading of 5-Hydroxymethylfurfural to Drop-in Biofuels by Solid Base and Bifunctional Metal-Acid Catalysts. 2015 , 8, 4022-9	70
1461	Non-Oxidative Dehydrogenation Pathways for the Conversion of C ₂ -C ₄ Alcohols to Carbonyl Compounds. 2015 , 8, 3959-62	10
1460	Chemical Conversions of Biomass-Derived Platform Chemicals over Copper-Silica Nanocomposite Catalysts. 2015 , 8, 2345-57	26
1459	One-Pot 2-Methyltetrahydrofuran Production from Levulinic Acid in Green Solvents Using Ni-Cu/Al ₂ O ₃ Catalysts. 2015 , 8, 3483-8	65
1458	Cascade Enzymatic Hydrolysis Coupling with Ultrafine Grinding Pretreatment for Sugarcane Bagasse Saccharification. 2015 , 28, 355-360	1
1457	. 2015 ,	5

1456	Dissolution and Hydrolysis of Lignocellulosic Biomass using Tailored Ionic Liquids. 2015 ,		
1455	A Facile and Eco-Effective Catalytic System for Synthesis of 5-Hydroxymethylfurfural from Glucose. 2015 , 11,		6
1454	Kraft Lignin Depolymerization in an Ionic Liquid without a Catalyst. 2015 , 10,		22
1453	High-Throughput Screening of Heterogeneous Catalysts for the Conversion of Furfural to Bio-Based Fuel Components. 2015 , 5, 2244-2257		26
1452	Conversion of Glucose into HMF Catalyzed by CPL-LiCl Investigated using Dual-Wavelength UV Spectrophotometry. 2015 , 11,		2
1451	Functionalized Activated Carbon Derived from Biomass for Photocatalysis Applications Perspective. 2015 , 2015, 1-30		33
1450	Catalytic conversion of biomass pyrolysis vapors into hydrocarbon fuel precursors. <i>Green Chemistry</i> , 2015 , 17, 2362-2368	10	62
1449	Dehydration of cellulose to levoglucosenone using polar aprotic solvents. 2015 , 8, 1808-1815		136
1448	An integrated process for the production of 2,5-dimethylfuran from fructose. <i>Green Chemistry</i> , 2015 , 17, 3310-3313	10	65
1447	Simulation and life cycle assessment of algae gasification process in dual fluidized bed gasifiers. <i>Green Chemistry</i> , 2015 , 17, 1793-1801	10	27
1446	Highly cited articles in biomass research: A bibliometric analysis. 2015 , 49, 12-20		43
1445	Novel pathways for fuels and lubricants from biomass optimized using life-cycle greenhouse gas assessment. 2015 , 112, 7645-9		90
1444	Advances and recent trends in heterogeneous photo(electro)-catalysis for solar fuels and chemicals. 2015 , 20, 6739-93		51
1443	Combined heterogeneous catalysis and dark fermentation systems for the conversion of cellulose into biohydrogen. 2015 , 101, 209-219		15
1442	Arylsulfonic acid functionalized hollow mesoporous carbon spheres for efficient conversion of levulinic acid or furfuryl alcohol to ethyl levulinate. 2015 , 179, 445-457		110
1441	Reaction pathways in the liquid phase alkylation of biomass-derived phenolic compounds. 2015 , 61, 598-609		29
1440	Catalytic upgrading of biomass-derived methyl ketones to liquid transportation fuel precursors by an organocatalytic approach. 2015 , 54, 4673-7		52
1439	Agricultural Biomass Based Potential Materials. 2015 ,		17

1438	Deactivation of solid catalysts in liquid media: the case of leaching of active sites in biomass conversion reactions. <i>Green Chemistry</i> , 2015 , 17, 4133-4145	10	152
1437	Rapid liquefaction of giant miscanthus feedstock in ethanol/water system for production of biofuels. 2015 , 91, 219-224		33
1436	Alkenes oligomerization with resin catalysts. 2015 , 138, 86-99		40
1435	Catalytic reactions of gamma-valerolactone: A platform to fuels and value-added chemicals. 2015 , 179, 292-304		288
1434	Synthesis of high density aviation fuel with cyclopentanol derived from lignocellulose. 2015 , 5, 9565		52
1433	Cross metathesis of bio-sourced fatty nitriles with acrylonitrile. 2015 , 146, 1107-1113		14
1432	Thermal properties of lignin in copolymers, blends, and composites: a review. <i>Green Chemistry</i> , 2015 , 17, 4862-4887	10	286
1431	Morphology Tailoring of Sulfonic Acid Functionalized Organosilica Nanohybrids for the Synthesis of Biomass-Derived Alkyl Levulicates. 2015 , 21, 10786-98		38
1430	Synthesis of Jet-Fuel Range Cycloalkanes from the Mixtures of Cyclopentanone and Butanal. 2015 , 54, 11825-11837		48
1429	Recyclable Supported Carbene Catalysts for High-Yielding Self-Condensation of Furaldehydes into C10 and C12 Furoins. 2015 , 5, 6907-6917		44
1428	Antiknock properties of furfural derivatives. 2015 , 88, 1778-1782		14
1427	Reaction routes in catalytic reforming of poly(3-hydroxybutyrate) into renewable hydrocarbon oil. 2015 , 5, 30005-30013		8
1426	Bioenergy: Biofuels Process Technology. 2015 , 165-207		1
1425	Direct thermo-catalytic transformation of pine wood into low oxygenated fuel: Influence of the support. 2015 , 255, 75-79		8
1424	Catalytic hydrothermal conversion of macroalgae-derived alginate: effect of pH on production of furfural and valuable organic acids under subcritical water conditions. 2015 , 399, 106-113		26
1423	A lignocellulosic ethanol strategy via nonenzymatic sugar production: process synthesis and analysis. 2015 , 182, 258-266		84
1422	Polyethylene Glycol-400-Functionalized Dicationic Acidic Ionic Liquids for Highly Efficient Conversion of Fructose into 5-Hydroxymethylfurfural. 2015 , 145, 1080-1088		14
1421	Conversion of cellulose to lactic acid catalyzed by erbium-exchanged montmorillonite K10. <i>Green Chemistry</i> , 2015 , 17, 2455-2463	10	86

1420	One-Step Process for the Production of BTEX and LPG-like fuel from Pentanediol. 2015 , 3, 381-385	4
1419	Inhibiting effect of tungstic compounds on glucose hydrogenation over Ru/C catalyst. 2015 , 24, 9-14	8
1418	Hydrothermal Carbonization of Biomass. 2015 , 325-352	15
1417	Synthesis of biomass-derived methylcyclopentane as a gasoline additive via aldol condensation/hydrodeoxygenation of 2,5-hexanedione. <i>Green Chemistry</i> , 2015 , 17, 2393-2397	10 49
1416	Investigation of Ce/Zr Oxide-Supported Ni Catalysts in the Steam Reforming of meta-Cresol as a Model Component for Bio-Derived Tar. 2015 , 7, 468-478	18
1415	Full, Reactive Solubilization of Humin Byproducts by Alkaline Treatment and Characterization of the Alkali-Treated Humins Formed. 2015 , 3, 533-543	45
1414	Fungal cellulases. 2015 , 115, 1308-448	513
1413	Mechanism of Brønsted acid-catalyzed glucose dehydration. 2015 , 8, 1334-41	107
1412	Non-hazardous Baeyer-Villiger oxidation of levulinic acid derivatives: alternative renewable access to 3-hydroxypropionates. 2015 , 51, 2874-7	19
1411	Effect of the Addition of Ethanol to Synthesis Gas on the Production of Higher Alcohols over Cs and Ru Modified Cu/ZnO Catalysts. 2015 , 54, 1452-1463	10
1410	Titania-Supported Catalysts for Levulinic Acid Hydrogenation: Influence of Support and its Impact on γ -Valerolactone Yield. 2015 , 8, 1538-47	68
1409	Catalytic total hydrodeoxygenation of biomass-derived polyfunctionalized substrates to alkanes. 2015 , 8, 1114-32	109
1408	Encapsulated heterogeneous base catalysts onto SBA-15 nanoporous material as highly active catalysts in the transesterification of sunflower oil to biodiesel. 2015 , 17, 1	30
1407	How to direct the fatty acid biosynthesis towards polyhydroxyalkanoates production?. 2015 , 74, 268-279	37
1406	Ring Activation of Furanic Compounds on Ruthenium-Based Catalysts. 2015 , 119, 6075-6085	25
1405	Deoxygenation of Biomass-Derived Oxygenates: Reaction of Furfural on Zn-Modified Pt(111). 2015 , 5, 2177-2183	62
1404	In situ generation of Ni nanoparticles from metal-organic framework precursors and their use for biomass hydrodeoxygenation. 2015 , 8, 1703-10	24
1403	Effect of catalyst contact on the pyrolysis of wheat straw and wheat husk. 2015 , 160, 64-70	26

1402	A Novel Group Contribution Method for the Prediction of the Derived Cetane Number of Oxygenated Hydrocarbons. 2015 , 29, 5781-5801		74
1401	Water-promoted selective heterogeneous catalytic trimerization of xylose-derived 2-methylfuran to diesel precursors. 2015 , 495, 200-205		21
1400	Production and catalytic transformation of levulinic acid: A platform for speciality chemicals and fuels. 2015 , 51, 986-997		240
1399	Expanding the scope of biogenic substrates for the selective production of formic acid from water-insoluble and wet waste biomass. <i>Green Chemistry</i> , 2015 , 17, 5164-5171	10	54
1398	Synthesis of isosorbide from sorbitol in water over high-silica aluminosilicate zeolites. 2015 , 505, 28-35		54
1397	Design Criteria for Future Fuels and Related Power Systems Addressing the Impacts of Non-CO2 Pollutants on Human Health and Climate Change. 2015 , 6, 101-20		8
1396	Biorenewable chemicals: Feedstocks, technologies and the conflict with food production. 2015 , 51, 506-520		73
1395	Insights into the solvation of glucose in water, dimethyl sulfoxide (DMSO), tetrahydrofuran (THF) and N,N-dimethylformamide (DMF) and its possible implications on the conversion of glucose to platform chemicals. 2015 , 5, 20756-20763		67
1394	Structural characterization of ¹³ C-enriched humins and alkali-treated ¹³ C humins by 2D solid-state NMR. <i>Green Chemistry</i> , 2015 , 17, 4383-4392	10	107
1393	Oxidation of levulinic acid for the production of maleic anhydride: breathing new life into biochemicals. <i>Green Chemistry</i> , 2015 , 17, 4367-4376	10	53
1392	Bio-derived fuel additives from furfural and cyclopentanone. 2015 , 138, 564-569		22
1391	Stabilizing cobalt catalysts for aqueous-phase reactions by strong metal-support interaction. 2015 , 330, 19-27		87
1390	Mechanistic Investigation of Isopropanol Conversion on Alumina Catalysts: Location of Active Sites for Alkene/Ether Production. 2015 , 5, 4423-4437		72
1389	Organocatalytic upgrading of furfural and 5-hydroxymethyl furfural to C10 and C12 furoins with quantitative yield and atom-efficiency. 2015 , 16, 7143-58		25
1388	High bio-based content waterborne UV-curable coatings with excellent adhesion and flexibility. 2015 , 87, 197-203		48
1387	Investigation of Polyol Adsorption on Ru, Pd, and Re Using vdW Density Functionals. 2015 , 119, 17182-17192		18
1386	Hydrothermal microwave valorization of eucalyptus using acidic ionic liquid as catalyst toward a green biorefinery scenario. 2015 , 193, 119-27		25
1385	Thermo-chemical reactions of algae, grape marc and wood chips using a semi-continuous/flow-through system. 2015 , 158, 927-936		5

1384	Recent developments on the catalytic technologies for the transformation of biomass into biofuels: A patent survey. 2015 , 51, 273-287	63
1383	Green solvents in carbohydrate chemistry: from raw materials to fine chemicals. 2015 , 115, 6811-53	236
1382	Ni nanoparticles supported on mesoporous silica (2D, 3D) architectures: highly efficient catalysts for the hydrocyclization of biomass-derived levulinic acid. 2015 , 5, 57201-57210	30
1381	Cellulose Hydrolysis in Acidified LiBr Molten Salt Hydrate Media. 2015 , 54, 5226-5236	43
1380	CHAPTER 1:The Search for Functional Porous Carbons from Sustainable Precursors. 2015 , 3-49	4
1379	Process systems engineering studies for the synthesis of catalytic biomass-to-fuels strategies. 2015 , 81, 57-69	44
1378	A facile and low-cost synthesis of MoS ₂ for hydrodeoxygenation of phenol. 2015 , 68, 31-35	38
1377	Consequences of poly(vinyl chloride) presence on the thermochemical process of lignocellulosic biomass in CO ₂ by thermogravimetric analysis. 2015 , 177, 346-54	5
1376	The Effect of Adsorbed Molecule Gas-Phase Deprotonation Enthalpy on Ion Exchange in Sodium Exchanged Zeolites: An In Situ FTIR Investigation. 2015 , 58, 393-404	19
1375	Pd/Nb ₂ O ₅ /SiO ₂ catalyst for the direct hydrodeoxygenation of biomass-related compounds to liquid alkanes under mild conditions. 2015 , 8, 1761-7	85
1374	Production of 5-hydroxymethylfurfural from agarose by using a solid acid catalyst in dimethyl sulfoxide. 2015 , 5, 47983-47989	16
1373	Biomass derived β -cyclodextrin-SO ₃ H carbonaceous solid acid catalyst for catalytic conversion of carbohydrates to 5-hydroxymethylfurfural. 2015 , 499, 213-216	49
1372	Selective nickel-catalyzed conversion of model and lignin-derived phenolic compounds to cyclohexanone-based polymer building blocks. 2015 , 8, 1805-18	104
1371	Acidolysis of E-O-4 Aryl-Ether Bonds in Lignin Model Compounds: A Modeling and Experimental Study. 2015 , 3, 1339-1347	33
1370	Lignosulfonate-based acidic resin for the synthesis of renewable diesel and jet fuel range alkanes with 2-methylfuran and furfural. <i>Green Chemistry</i> , 2015 , 17, 3644-3652	10 58
1369	Ru nanoparticles confined in Zr-containing spherical mesoporous silica containers for hydrogenation of levulinic acid and its esters into γ -valerolactone at ambient conditions. 2015 , 258, 262-269	46
1368	Oxo-Rhenium-Catalyzed Deoxydehydration of Polyols with Hydroaromatic Reductants. 2015 , 34, 1985-1990	36
1367	Design of Lewis-acid centres in zeolitic matrices for the conversion of renewables. 2015 , 44, 7025-43	138

1366	Effect of acidity and porosity of alkali-treated ZSM-5 zeolite on eugenol hydrodeoxygenation. 2015 , 258, 90-95	37
1365	Conversion of Furfural to Cyclopentanol on Cu/Zn/Al Catalysts Derived from Hydrotalcite-Like Materials. 2015 , 145, 1557-1565	35
1364	Lignocellulosic biomass: a sustainable platform for the production of bio-based chemicals and polymers. 2015 , 6, 4497-4559	1391
1363	Ionic liquid-stabilized nanoparticles as catalysts for the conversion of biomass. <i>Green Chemistry</i> , 2015 , 17, 3195-3206	10 109
1362	Upgrading Fast Pyrolysis Bio-Oil Quality by Esterification and Azeotropic Water Removal. 2015 , 29, 2527-2534	44
1361	Rational nanoparticle synthesis to determine the effects of size, support, and K dopant on Ru activity for levulinic acid hydrogenation to γ -valerolactone. 2015 , 326, 69-81	73
1360	Thermally stable phosphorus and nickel modified ZSM-5 zeolites for catalytic co-pyrolysis of biomass and plastics. 2015 , 5, 30485-30494	49
1359	Transfer Hydrogenation of Ethyl Levulinate to γ -Valerolactone Catalyzed by Iron Complexes. 2015 , 33, 405-408	28
1358	Biomass to Furanics: Renewable Routes to Chemicals and Fuels. 2015 , 3, 2591-2605	171
1357	H ₂ production from aqueous-phase reforming of glycerol over Cu/Ni bimetallic catalysts supported on carbon nanotubes. 2015 , 40, 14833-14844	33
1356	Conversion of concentrated sugar solutions into 5-hydroxymethyl furfural and furfural using Brønsted acidic ionic liquids. 2015 , 5, 5086-5090	48
1355	Recent advances in optimal design of thermochemical conversion of biomass to chemicals and liquid fuels. 2015 , 10, 70-76	11
1354	Role of Brønsted and Lewis acid sites on Ni/TiO ₂ catalyst for vapour phase hydrogenation of levulinic acid: Kinetic and mechanistic study. 2015 , 505, 217-223	84
1353	The nature of active sites in PtReOX/TiO ₂ catalysts for selective hydrogenation of carboxylic acids to alcohols. 2015 , 24, 646-654	18
1352	Bronsted acid-type biosurfactant for heterocyclization: a green protocol for benzopyran synthesis. 2015 , 5, 84610-84620	16
1351	Modeling the Surface Chemistry of Sugars: Glycolaldehyde on Rhodium (100). 2015 , 119, 22915-22923	5
1350	Speciation and kinetic study of iron promoted sugar conversion to 5-hydroxymethylfurfural (HMF) and levulinic acid (LA). 2015 , 2, 1388-1396	40
1349	Advances in Bioprocess Technology. 2015 ,	4

1348	Highly efficient conversion of biomass-derived levulinic acid into γ -valerolactone over Ni/MgO catalyst. 2015 , 5, 72037-72045		32
1347	From industrial black liquor to pure phenolic compounds: A combination of catalytic conversion with ionic liquids extraction. 2015 , 502, 230-238		4
1346	An interchangeable homogeneous \leftrightarrow heterogeneous catalyst system for furfural upgrading. <i>Green Chemistry</i> , 2015 , 17, 5149-5153	10	14
1345	A thermogravimetric analysis (TGA) method to determine the catalytic conversion of cellulose from carbon-supported hydrogenolysis process. 2015 , 616, 9-13		24
1344	Synthesis of rare earth doped TiO ₂ nanorods as photocatalysts for lignin degradation. 2015 , 7, 16695-703		53
1343	Facile, room-temperature pre-treatment of rice husks with tetrabutylphosphonium hydroxide: Enhanced enzymatic and acid hydrolysis yields. 2015 , 197, 252-9		18
1342	Recent developments in maleic acid synthesis from bio-based chemicals. 2015 , 3,		77
1341	Hydrogenation of biomass-derived levulinic acid to γ -valerolactone catalyzed by PNP-Ir pincer complexes: A computational study. 2015 , 797, 165-170		11
1340	Integrated biomass and fossil fuel systems towards the production of fuels and chemicals: state of the art approaches and future challenges. 2015 , 9, 66-74		22
1339	Hydrolysis and alcoholysis of polysaccharides with high efficiency catalyzed by a (C16TA) _x H ₆ P ₂ W ₁₈ O ₆₂ nanoassembly. 2015 , 5, 94155-94163		10
1338	Alkali-metal-modified ZSM-5 zeolites for improvement of catalytic dehydration of lactic acid to acrylic acid. 2015 , 36, 1861-1866		25
1337	Surfactant-free Pd nanoparticles immobilized to a metal-organic framework with size- and location-dependent catalytic selectivity. 2015 , 51, 2577-80		67
1336	Synthetic liquid fuel production from gasification. 2015 , 147-174		3
1335	Opportunities, recent trends and challenges of integrated biorefinery: Part I. 2015 , 43, 1427-1445		254
1334	Methylation of softwood kraft lignin with dimethyl carbonate. <i>Green Chemistry</i> , 2015 , 17, 1077-1087	10	59
1333	Water-Promoted Hydrogenation of Levulinic Acid to γ -Valerolactone on Supported Ruthenium Catalyst. 2015 , 7, 508-512		95
1332	Catalytic Hydrogenation of Alkali Lignin to Bio-oil Using Fullerene-like Vanadium Sulfide. 2015 , 29, 255-261		17
1331	The AlphaBet(a) of Salty Glucose Pyrolysis: Computational Investigations Reveal Carbohydrate Pyrolysis Catalytic Action by Sodium Ions. 2015 , 5, 192-202		45

1330	Humin based by-products from biomass processing as a potential carbonaceous source for synthesis gas production. <i>Green Chemistry</i> , 2015 , 17, 959-972	10	111
1329	Renewable thermosetting resins and thermoplastics from vanillin. <i>Green Chemistry</i> , 2015 , 17, 1249-1258	10	100
1328	Renewable energy and fuel production over transition metal oxides: The role of oxygen defects and acidity. 2015 , 240, 220-228		20
1327	Upgrading biomass-derived furans via acid-catalysis/hydrogenation: the remarkable difference between water and methanol as the solvent. <i>Green Chemistry</i> , 2015 , 17, 219-224	10	86
1326	Lignin solubilisation and gentle fractionation in liquid ammonia. <i>Green Chemistry</i> , 2015 , 17, 325-334	10	79
1325	Industrial Crops. 2015 ,		8
1324	Kinetic study of the competitive hydrogenation of glycolaldehyde and glucose on Ru/C with or without AMT. 2015 , 61, 224-238		38
1323	Diesel and aviation kerosene with desired aromatics from hydroprocessing of jatropha oil over hydrogenation catalysts supported on hierarchical mesoporous SAPO-11. 2015 , 490, 108-116		108
1322	Catalytic routes towards acrylic acid, adipic acid and ϵ -caprolactam starting from biorenewables. <i>Green Chemistry</i> , 2015 , 17, 1341-1361	10	176
1321	A review of the combustion and emissions properties of advanced transportation biofuels and their impact on existing and future engines. 2015 , 42, 1393-1417		283
1320	Aviation biofuel from renewable resources: Routes, opportunities and challenges. 2015 , 42, 1234-1244		200
1319	Synthesis of bio-based unsaturated polyester resins and their application in waterborne UV-curable coatings. 2015 , 78, 49-54		87
1318	Rational Design of a Bifunctional Catalyst for the Oxydehydration of Glycerol: A Combined Theoretical and Experimental Study. 2015 , 5, 82-94		30
1317	Hydrodeoxygenation processes: advances on catalytic transformations of biomass-derived platform chemicals into hydrocarbon fuels. 2015 , 178, 108-118		238
1316	ϵ -Valerolactone as an alternative biomass-derived medium for the Sonogashira reaction. <i>Green Chemistry</i> , 2015 , 17, 1071-1076	10	103
1315	Hydrogenation of levulinic acid to ϵ -Valerolactone over copper catalysts supported on γ -Al ₂ O ₃ . 2015 , 250, 209-217		77
1314	A biomass-derived safe medium to replace toxic dipolar solvents and access cleaner Heck coupling reactions. <i>Green Chemistry</i> , 2015 , 17, 365-372	10	101
1313	Arabinogalactan hydrolysis and hydrolytic hydrogenation using functionalized carbon materials. 2015 , 257, 169-176		19

1312	Selective oxidation of 5-hydroxymethyl-2-furfural to furan-2,5-dicarboxylic acid over spinel mixed metal oxide catalyst. 2015 , 58, 179-182		56
1311	Chemical conversion pathways for carbohydrates. <i>Green Chemistry</i> , 2015 , 17, 40-71	10	241
1310	Pd/C-catalyzed reactions of HMF: decarbonylation, hydrogenation, and hydrogenolysis. <i>Green Chemistry</i> , 2015 , 17, 307-313	10	128
1309	Hydrodeoxygenation of dibenzofuran over SiO ₂ , Al ₂ O ₃ /SiO ₂ and ZrO ₂ /SiO ₂ supported Pt catalysts. 2015 , 5, 465-474		35
1308	Fe/HY zeolite as an effective catalyst for levulinic acid production from glucose: Characterization and catalytic performance. 2015 , 163, 487-498		156
1307	. 2016 ,		7
1306	Production of Levulinic Acid from Pennisetum alopecuroides in the Presence of an Acid Catalyst. 2016 , 11,		8
1305	. 2016 ,		9
1304	Design of catalytic micro trickle bed reactors. 2016 , 1,		1
1303	Production and Characterization of Polyhydroxyalkanoates and Native Microorganisms Synthesized from Fatty Waste. 2016 , 2016, 1-12		21
1302	Knock Resistance and Fine Particle Emissions for Several Biomass-Derived Oxygenates in a Direct-Injection Spark-Ignition Engine. 2016 , 9, 59-70		38
1301	Understanding the Performance and Stability of Supported Ni-Co-Based Catalysts in Phenol HDO. 2016 , 6, 176		17
1300	Low and Medium Calorific Value Gasification Gas Combustion in IC Engines. 2016 ,		2
1299	Reactivity of Hydrogen on and in Nanostructured Molybdenum Nitride: Crotonaldehyde Hydrogenation. 2016 , 6, 5797-5806		32
1298	Catalytic Dry Reforming for Biomass-Based Fuels Processing: Progress and Future Perspectives. 2016 , 4, 881-890		20
1297	Biorenewable Thermoplastic Elastomeric Triblock Copolymers Containing Salicylic Acid-Derived End-Blocks and a Fatty Acid-Derived Midblock. 2016 , 217, 292-303		12
1296	Dual-bed catalyst system for the direct synthesis of high density aviation fuel with cyclopentanone from lignocellulose. 2016 , 62, 2754-2761		33
1295	Dehydration of Xylose to Furfural in Alcohol Media in the Presence of Solid Acid Catalysts. 2016 , 8, 2089-2099		37

1294	Kinetics of Catalytic Hydrogenation of 5-Hydroxymethylfurfural to 2,5-bis-Hydroxymethylfuran in Aqueous Solution over Ru/C. 2016 , 48, 318-328	20
1293	Production of liquid hydrocarbon fuels with 3-pentanone and platform molecules derived from lignocellulose. 2016 , 6, 62974-62980	14
1292	Selective Conversion of 5-Hydroxymethylfuraldehyde Using Cp*Ir Catalysts in Aqueous Formate Buffer Solution. 2016 , 9, 1209-15	31
1291	Heterogeneous Catalytic Conversion of Biobased Chemicals into Liquid Fuels in the Aqueous Phase. 2016 , 9, 1355-85	50
1290	Direct Conversion of Mono- and Polysaccharides into 5-Hydroxymethylfurfural Using Ionic-Liquid Mixtures. 2016 , 9, 2089-96	43
1289	Levulinic Acid as a Catalyst for the Production of 5-Hydroxymethylfurfural and Furfural from Lignocellulose Biomass. 2016 , 8, 640-647	37
1288	One-Pot Deoxygenation of Fructose to Furfuryl Alcohol by Sequential Dehydration and Decarbonylation. 2016 , 8, 1379-1385	14
1287	Microkinetic analysis of ring opening and decarboxylation of γ -Valerolactone over silica alumina. 2016 , 344, 640-656	27
1286	Highly Selective Upgrading of Biomass-Derived Alcohol Mixtures for Jet/Diesel-Fuel Components. 2016 , 9, 3465-3472	12
1285	Biofuels: Historical Perspectives and Public Opinions. 2016 , 21-42	1
1284	NMR Insights into the Unexpected Interaction of SnCl ₄ with d-Glucosamine and Its Effect on 5-HMF Preparation in ZnCl ₂ Molten Salt Hydrate Medium. 2016 , 1, 6540-6545	4
1283	Acid-base properties and catalytic activity of metal-organic frameworks: A view from spectroscopic and semiempirical methods. 2016 , 58, 209-307	31
1282	Catalytic co-pyrolysis of lignocellulosic biomass with polymers: a critical review. <i>Green Chemistry</i> , 2016 , 18, 4145-4169	10 261
1281	Process synthesis and analysis for catalytic conversion of lignocellulosic biomass to fuels: Separate conversion of cellulose and hemicellulose using 2-sec-butylphenol (SBP) solvent. 2016 , 171, 483-490	22
1280	Ceria promoted deoxygenation and denitrogenation of <i>Thalassiosira weissflogii</i> and its model compounds by catalytic in-situ pyrolysis. 2016 , 208, 140-148	29
1279	Enhancement of biomass conversion in catalytic fast pyrolysis by microwave-assisted formic acid pretreatment. 2016 , 214, 520-527	45
1278	Direct synthesis of gasoline and diesel range branched alkanes with acetone from lignocellulose. <i>Green Chemistry</i> , 2016 , 18, 3707-3711	10 28
1277	Catalytic dehydration of methyl lactate: Reaction mechanism and selectivity control. 2016 , 339, 21-30	32

1276	Efficient valorization of biomass to biofuels with bifunctional solid catalytic materials. 2016 , 55, 98-194	181
1275	Conversion of saccharides into levulinic acid and 5-hydroxymethylfurfural over WO ₃ /Ta ₂ O ₅ catalysts. 2016 , 6, 49760-49763	12
1274	Synergistic Effects in Bimetallic Palladium-Copper Catalysts Improve Selectivity in Oxygenate Coupling Reactions. 2016 , 138, 6805-12	77
1273	Furan Production from Glycoaldehyde over HZSM-5. 2016 , 4, 2615-2623	14
1272	Effect of the C ₃ substitution on the ketonic decarboxylation of carboxylic acids over m-ZrO ₂ : the role of entropy. 2016 , 6, 5561-5566	11
1271	Ruthenium nanoparticles supported on N-containing mesoporous polymer catalyzed aerobic oxidation of biomass-derived 5-hydroxymethylfurfural (HMF) to 2,5-diformylfuran (DFF). 2016 , 520, 44-52	45
1270	Hydrolytic oxidation of cellulose to formic acid in the presence of Mo-V-P heteropoly acid catalysts. 2016 , 278, 74-81	41
1269	Lignin-derived oxygenate reforming on a bimetallic surface: The reaction of benzaldehyde on Zn/Pt(111). 2016 , 650, 161-166	11
1268	Selective aerobic oxidation of furfural to maleic anhydride with heterogeneous Mo ₁₀ V ₁₀ catalysts. <i>Green Chemistry</i> , 2016 , 18, 2976-2980	10 63
1267	Tandem thionation of biomass derived levulinic acid with Lawesson's reagent. <i>Green Chemistry</i> , 2016 , 18, 2971-2975	10 10
1266	Mechanistic Insight to C-C Bond Formation and Predictive Models for Cascade Reactions among Alcohols on Ca- and Sr-Hydroxyapatites. 2016 , 6, 4170-4183	69
1265	Pervaporation-assisted catalytic conversion of xylose to furfural. <i>Green Chemistry</i> , 2016 , 18, 4073-4085	10 23
1264	Oxidative esterification of furfural over Au ₂₅ Pd/HAP-T and Au ₂₅ Ag/HAP-T bimetallic catalysts supported on mesoporous hydroxyapatite nanorods. 2016 , 6, 45907-45922	23
1263	Pretreatment and conversion of lignocellulose biomass into valuable chemicals. 2016 , 6, 46834-46852	147
1262	Intensification effect of peroxide hydrogen on the complete dissolution of lignocellulose under mild conditions. 2016 , 6, 41032-41039	3
1261	Controlled deposition of Pt nanoparticles on Fe ₃ O ₄ @carbon microspheres for efficient oxidation of 5-hydroxymethylfurfural. 2016 , 6, 51229-51237	35
1260	Production of high-energy-density fuels by catalytic α -pinene dimerization: Effects of the catalyst surface acidity and pore width on selective dimer production. 2016 , 116, 72-79	23
1259	Enhancing the Catalytic Properties of Ruthenium Nanoparticle-SILP Catalysts by Dilution with Iron. 2016 , 6, 3719-3726	53

1258	Promotion effects of Pd on tungsten carbide catalysts: physiochemical properties and cellulose conversion performance. 2016 , 6, 87756-87766		5
1257	Translational Science for Energy and Beyond. 2016 , 55, 9131-43		9
1256	Ex situ thermo-catalytic upgrading of biomass pyrolysis vapors using a traveling wave microwave reactor. 2016 , 183, 995-1004		44
1255	The effect of C-OH functionality on the surface chemistry of biomass-derived molecules: ethanol chemistry on Rh(100). 2016 , 18, 30117-30127		8
1254	Nanoparticles on Supported Ionic Liquid Phases [Opportunities for Application in Catalysis. 2016 , 249-273		6
1253	Insights into the Ring-Opening of Biomass-Derived Furanics over Carbon-Supported Ruthenium. 2016 , 9, 3113-3121		22
1252	A bio-based green process for catalytic adipic acid production from lignocellulosic biomass using cellulose and hemicellulose derived Valerolactone. 2016 , 129, 75-80		37
1251	Mechanism of transmethylation in anisole decomposition over HZSM-5: Experimental study. 2016 , 122, 323-331		7
1250	Sustainable hybrid photocatalysts: titania immobilized on carbon materials derived from renewable and biodegradable resources. <i>Green Chemistry</i> , 2016 , 18,	10	112
1249	Furfural: A Promising Platform Compound for Sustainable Production of C4 and C5 Chemicals. 2016 , 6, 7621-7640		440
1248	Bifunctional Ruthenium Nanoparticle-SILP Catalysts () for the Hydrodeoxygenation of Eucalyptol under Batch and Continuous Flow Conditions. 2016 , 4, 6186-6192		20
1247	Selective hydrogenation of levulinate esters to 1,4-pentanediol using a ternary skeletal CuAlZn catalyst. <i>Green Chemistry</i> , 2016 , 18, 5999-6003	10	32
1246	Effective production of fermentable sugars from brown macroalgae biomass. 2016 , 100, 9439-9450		19
1245	Synthesis of High-Density Aviation Fuel with Cyclopentanol. 2016 , 4, 6160-6166		38
1244	Direct conversion of chitosan to 5-hydroxymethylfurfural in water using Brønsted-Lewis acidic ionic liquids as catalysts. 2016 , 6, 103774-103781		25
1243	Zeolite and zeotype-catalysed transformations of biofuranic compounds. <i>Green Chemistry</i> , 2016 , 18, 5701-5735	10	113
1242	The Role of the Hydrogen Source on the Selective Production of Valerolactone and 2-Methyltetrahydrofuran from Levulinic Acid. 2016 , 9, 2488-95		42
1241	Methodology for the experimental measurement of vapor-liquid equilibrium distillation curves using a modified ASTM D86 setup. 2016 , 182, 467-479		24

1240	Multiple synergistic benefits of selective fermentation of <i>Scenedesmus</i> biomass for fuel recovery via wet-biomass extraction. 2016 , 17, 253-260	12
1239	Organocatalytic Cross-Coupling of Biofurans to Multifunctional Difuranic C11 Building Blocks. 2016 , 4, 4927-4936	20
1238	Formic Acid-Based Fischer-Tropsch Synthesis for Green Fuel Production from Wet Waste Biomass and Renewable Excess Energy. 2016 , 4, 5078-5086	35
1237	MoO ₂ -based cathode for CO ₂ and H ₂ O electrolysis. 2016 , 41, 11895-11899	8
1236	Methyl-ligated tin silsesquioxane catalyzed reactions of glucose. 2016 , 341, 62-71	12
1235	Recyclable montmorillonite-supported thiazolium ionic liquids for high-yielding and solvent-free upgrading of furfural and 5-hydroxymethylfurfural to C10 and C12 furoins. 2016 , 6, 76707-76715	12
1234	Facile synthesis of hierarchical pore foam catalysts with Brønsted-Lewis acid sites for the one-pot conversion of cellulose to 5-hydroxymethylfurfural. 2016 , 6, 80368-80382	7
1233	Thermal decomposition kinetics of light polycyclic aromatic hydrocarbons as surrogate biomass tar. 2016 , 6, 83154-83162	19
1232	Synthesis of jet fuel range cycloalkanes with diacetone alcohol from lignocellulose. <i>Green Chemistry</i> , 2016 , 18, 5751-5755	10 28
1231	Synthesis of 2,5-Hexanedione from Biomass Resources Using a Highly Efficient Biphasic System. 2016 , 1, 1252-1255	17
1230	Production of Fuels and Chemicals from Biomass: Condensation Reactions and Beyond. 2016 , 1, 32-58	230
1229	Homogeneous Ethanol to Butanol Catalysis: Cuerbet Renewed. 2016 , 6, 7125-7132	105
1228	Highly Selective Deoxydehydration of Tartaric Acid over Supported and Unsupported Rhenium Catalysts with Modified Acidities. 2016 , 9, 2774-2778	25
1227	Efficient production of 5-hydroxymethylfurfural from hexoses using solid acid SO ₄ ²⁻ /In ₂ O ₃ -ATP in a biphasic system. 2016 , 37, 1362-1368	11
1226	Modeling the surface chemistry of biomass model compounds on oxygen-covered Rh(100). 2016 , 18, 23888-903	8
1225	Catalytic Reforming of Oxygenates: State of the Art and Future Prospects. 2016 , 116, 11529-11653	201
1224	Transformations of Organic Molecules over Metal Surfaces: Insights from Computational Catalysis. 2016 , 16, 2388-2404	12
1223	On the Structure Sensitivity of Formic Acid Decomposition on Cu Catalysts. 2016 , 59, 1580-1588	25

1222	Enhanced HDO activity of Ni2P promoted with noble metals. 2016 , 6, 7323-7333		24
1221	Reaction mechanism of aqueous-phase conversion of γ -valerolactone (GVL) over a Ru/C catalyst. 2016 , 25, 1008-1014		10
1220	Recent advances of titanium dioxide (TiO ₂) for green organic synthesis. 2016 , 6, 108741-108754		87
1219	An experimental and kinetic modeling study including coke formation for catalytic pyrolysis of furfural. 2016 , 173, 258-265		23
1218	Ni-based bimetallic heterogeneous catalysts for energy and environmental applications. 2016 , 9, 3314-3347		413
1217	Searching for novel reusable biomass-derived solvents: furfuryl alcohol/water azeotrope as a medium for waste-minimised copper-catalysed azide-alkyne cycloaddition. <i>Green Chemistry</i> , 2016 , 18, 6380-6386	10	30
1216	Compositional and structural feedstock requirements of a liquid phase cellulose-to-naphtha process in a carbon- and hydrogen-neutral biorefinery context. <i>Green Chemistry</i> , 2016 , 18, 5594-5606	10	19
1215	Hydrodeoxygenation of biodiesel-related fatty acid methyl esters to diesel-range alkanes over zeolite-supported ruthenium catalysts. 2016 , 6, 7239-7251		37
1214	One-Step Synthesizable Lindqvist-Type Polyoxometalates as Promising New Catalysts for Selective Conversion of Glucose as a Model Substrate for Lignocellulosic Biomass to Formic Acid. 2016 , 1, 2889-2894		14
1213	Direct hydrodeoxygenation of raw woody biomass into liquid alkanes. 2016 , 7, 11162		271
1212	DFT Analyses of Reaction Pathways and Temperature Effects on various Guaiacol Conversion Reactions in Gas Phase Environment. 2016 , 1, 6196-6205		21
1211	Efficient dual acidic carbo-catalyst for one-pot conversion of carbohydrates to levulinic acid. 2016 , 6, 100417-100426		7
1210	Current and Potential Aviation Additives for Higher Biofuel Blends in Jet A-1. 2016 , 261-275		2
1209	Palladium catalyzed hydrogenation of biomass derived halogenated furfurals. 2016 , 6, 103149-103159		4
1208	Direct carbon-carbon coupling of furanics with acetic acid over Brønsted zeolites. 2016 , 2, e1601072		34
1207	Sulfonic acid-functionalized mesoporous carbon/silica as efficient catalyst for dehydration of fructose into 5-hydroxymethylfurfural. 2016 , 6, 101526-101534		18
1206	Conversion of sugarcane carbohydrates into platform chemicals. 2016 , 207-236		1
1205	Superstructure optimization of integrated fast pyrolysis-gasification for production of liquid fuels and propylene. 2016 , 62, 3155-3176		24

1204	Recyclable Earth-Abundant Metal Nanoparticle Catalysts for Selective Transfer Hydrogenation of Levulinic Acid to Produce γ -Valerolactone. 2016 , 9, 181-5	32
1203	Selective ketonization of acetic acid over HZSM-5: The importance of acyl species and the influence of water. 2016 , 340, 76-84	48
1202	A Stochastic Method to Generate Libraries of Structural Representations of Lignin. 2016 , 30, 5835-5845	26
1201	Selectivity Control in the Catalytic Dehydration of Methyl Lactate: The Effect of Pyridine. 2016 , 6, 5117-5131	22
1200	Electricity production from lignin photocatalytic degradation byproducts. 2016 , 111, 774-784	15
1199	Thermo-chemical pretreatment of rice straw for further processing for levulinic acid production. 2016 , 218, 232-46	29
1198	Chemical- and Solvent-Free Mechanochemical Fractionation of Biomass Induced by Tribo-Electrostatic Charging: Separation of Proteins and Lignin. 2016 , 4, 4166-4173	29
1197	Intrinsic reactivity of Ni, Pd and Pt surfaces in dry reforming and competitive reactions: Insights from first principles calculations and microkinetic modeling simulations. 2016 , 343, 196-207	111
1196	1,2-Ethanediol and 1,3-Propanediol Conversions over (MO ₃) ₃ (M = Mo, W) Nanoclusters: A Computational Study. 2016 , 120, 1897-907	5
1195	A mild AlCl ₃ -catalyzed ethanol pretreatment and its effects on the structural changes of Eucalyptus wood lignin and the saccharification efficiency. 2016 , 6, 57986-57995	20
1194	Studies of synergy between metal-support interfaces and selective hydrogenation of HMF to DMF in water. 2016 , 340, 248-260	78
1193	Formic acid-mediated liquefaction of chitin. <i>Green Chemistry</i> , 2016 , 18, 5050-5058	10 58
1192	Levulinic Acid Biorefineries: New Challenges for Efficient Utilization of Biomass. 2016 , 9, 562-82	408
1191	Influence of the ionic liquid presence on the selective oxidation of glucose over molybdenum based catalysts. 2016 , 278, 82-90	6
1190	Selective fermentation of carbohydrate and protein fractions of <i>Scenedesmus</i> , and biohydrogenation of its lipid fraction for enhanced recovery of saturated fatty acids. 2016 , 113, 320-9	24
1189	Glucose to Fructose Isomerization in Aqueous Media over Homogeneous and Heterogeneous Catalysts. 2016 , 8, 1100-1110	64
1188	Hydrogenation of biomass-derived levulinic acid to γ -Valerolactone over copper catalysts supported on ZrO ₂ . 2016 , 91, 769-776	29
1187	Coupling chemical and biological catalysis: a flexible paradigm for producing biobased chemicals. 2016 , 38, 54-62	61

1186	Model-Based Design of Tailor-Made Biofuels. 2016 , 30, 1109-1134		54
1185	Selective oxidation of furfural in a bi-phasic system with homogeneous acid catalyst. 2016 , 276, 97-104		47
1184	Chinese energy and fuels research priorities and trend: A bibliometric analysis. 2016 , 58, 966-975		29
1183	Integrated process for the catalytic conversion of biomass-derived syngas into transportation fuels. <i>Green Chemistry</i> , 2016 , 18, 1880-1891	10	35
1182	Ionic liquid pretreatment as emerging approaches for enhanced enzymatic hydrolysis of lignocellulosic biomass. 2016 , 109, 252-267		225
1181	Combination of lignin and L-lactide towards grafted copolymers from lignocellulosic butanol residue. 2016 , 86, 80-8		10
1180	Transformation of bio-derived acids into fuel-like alkanes via ketonic decarboxylation and hydrodeoxygenation: Design of multifunctional catalyst, kinetic and mechanistic aspects. 2016 , 25, 208-224		31
1179	Gas Phase Hydrogenation of Levulinic Acid to γ -Valerolactone. 2016 , 146, 28-34		9
1178	The importance of pretreatment and feedstock purity in the reductive splitting of (ligno)cellulose by metal supported USY zeolite. <i>Green Chemistry</i> , 2016 , 18, 2095-2105	10	33
1177	Liquid hydrocarbon fuels from catalytic cracking of waste cooking oils using ultrastable zeolite USY as catalyst. 2016 , 117, 268-272		33
1176	Synthesis of renewable diesel with 2-methylfuran and angelica lactone derived from carbohydrates. <i>Green Chemistry</i> , 2016 , 18, 1218-1223	10	22
1175	Design of Cellulosic Ethanol Supply Chains with Regional Depots. 2016 , 55, 3420-3432		22
1174	Selectivity-Switchable Conversion of Cellulose to Glycols over NiSn Catalysts. 2016 , 6, 191-201		54
1173	Catalytic transformation of carbohydrates into 5-hydroxymethyl furfural over tin phosphate in a water-containing system. 2016 , 264, 131-135		17
1172	Industrially scalable and cost-effective synthesis of 1,3-cyclopentanediol with furfuryl alcohol from lignocellulose. <i>Green Chemistry</i> , 2016 , 18, 3607-3613	10	31
1171	Oxidative Dehydration of Glycerol to Acrylic Acid over Vanadium-Substituted Cesium Salts of Keggin-Type Heteropolyacids. 2016 , 6, 2785-2791		45
1170	Progress in the production of biomass-to-liquid biofuels to decarbonize the transport sector □ prospects and challenges. 2016 , 6, 32140-32170		42
1169	Direct Conversion of Cellulose into Ethyl Lactate in Supercritical Ethanol-Water Solutions. 2016 , 9, 36-41		35

1168	Nickel catalysed hydrogenation of aldol condensation product of furfural with cyclopentanone to C15 cyclic ethers. 2016 , 1, 331-336	6
1167	Catalytic Fractionation of Raw Biomass to Biochemicals and Organosolv Lignin in a Methyl Isobutyl Ketone/H ₂ O Biphasic System. 2016 , 4, 2020-2026	27
1166	Solvent effects in catalysis: rational improvements of catalysts via manipulation of solvent interactions. 2016 , 6, 3302-3316	188
1165	Mechanistic insights into the ring-opening of biomass derived lactones. 2016 , 6, 12932-12942	27
1164	Enhancing Mn(II)-Binding and Manganese Peroxidase Activity in a Designed Cytochrome c Peroxidase through Fine-Tuning Secondary-Sphere Interactions. 2016 , 55, 1494-502	15
1163	Base-Catalyzed Depolymerization of Biorefinery Lignins. 2016 , 4, 1474-1486	125
1162	Hydrolysis of Cellulose to Glucose Using Carbon Catalysts. 2016 , 43-75	1
1161	Role of alkali earth metals over Pd/Al ₂ O ₃ for decarbonylation of 5-hydroxymethylfurfural. 2016 , 6, 4377-4388	23
1160	A Study on Catalytic Conversion of Non-Food Biomass into Chemicals. 2016 ,	5
1159	Photocatalytic production of hydrogen from biomass-derived feedstocks. 2016 , 315, 1-66	238
1158	Production of biofuel additives by esterification and acetalization of bioglycerol. 2016 , 19, 1194-1202	24
1157	One-pot conversion of biomass-derived carbohydrates into 5-[(formyloxy)methyl]furfural: A novel alternative platform chemical. 2016 , 83, 408-413	26
1156	Bristled acidic ionic liquids: Green catalysts for essential organic reactions. 2016 , 218, 95-105	116
1155	Bioethanol dehydrogenation over copper supported on functionalized graphene materials and a high surface area graphite. 2016 , 102, 426-436	31
1154	Selective aldol condensation of biomass-derived levulinic acid and furfural in aqueous-phase over MgO and ZnO. <i>Green Chemistry</i> , 2016 , 18, 3430-3438	10 56
1153	The catalytic conversion of fructose into 5-hydroxymethylfurfural over acid-functionalized KIT-6, an ordered mesoporous silica. 2016 , 294, 380-388	65
1152	Vapor phase hydrogenation of furfural over nickel mixed metal oxide catalysts derived from layered double hydroxides. 2016 , 517, 187-195	58
1151	Furfural: a renewable and versatile platform molecule for the synthesis of chemicals and fuels. 2016 , 9, 1144-1189	865

1150	Transition-metal catalyzed valorization of lignin: the key to a sustainable carbon-neutral future. 2016 , 14, 1853-914		121
1149	Producing petrochemicals from catalytic fast pyrolysis of corn fermentation residual by-products generated from citric acid production. 2016 , 89, 331-338		9
1148	Utilization of Green Chemical Techniques in Enzymolysis of Cellulose. 2016 , 139-154		
1147	Subcritical water hydrolysis of durian seeds waste for bioethanol production. 2016 , 7, 29-37		12
1146	Selective hydrogenation of D-glucose using amine functionalized nanoporous polymer supported Ru nanoparticles based catalyst. 2016 , 265, 163-173		34
1145	In situ generation of water-stable and -soluble ruthenium complexes of pyridine-based chelate-ligands and their use for the hydrodeoxygenation of biomass-related substrates in aqueous acidic medium. 2016 , 422, 175-187		5
1144	The Effect of Ag in the Cu/ZrO ₂ Performance for the Ethanol Conversion. 2016 , 59, 357-365		17
1143	Deoxydehydration (DODH) of Biomass-Derived Molecules. 2016 , 1-11		3
1142	Simple efficient one-pot synthesis of 5-hydroxymethylfurfural and 2,5-diformylfuran from carbohydrates. 2016 , 1, 176-182		19
1141	Effects of nano-structured CoMo catalysts on hydrodeoxygenation of fast pyrolysis oil in supercritical ethanol. 2016 , 269, 182-194		43
1140	Ru nanoparticles supported graphene oxide catalyst for hydrogenation of bio-based levulinic acid to cyclic ethers. 2016 , 265, 174-183		41
1139	Highly Efficient Process for the Conversion of Glycerol to Acrylic Acid via Gas Phase Catalytic Oxidation of an Allyl Alcohol Intermediate. 2016 , 6, 143-150		50
1138	Production of liquid hydrocarbon fuels with acetoin and platform molecules derived from lignocellulose. <i>Green Chemistry</i> , 2016 , 18, 2165-2174	10	49
1137	Highly selective catalytic conversion of furfural to Ebutyrolactone. <i>Green Chemistry</i> , 2016 , 18, 638-642	10	38
1136	Intermediate oxiranes in the base-catalyzed depolymerisation of lignin. <i>Green Chemistry</i> , 2016 , 18, 1590-1596	11	
1135	Homogeneous Catalysts for the Hydrodeoxygenation of Biomass-Derived Carbohydrate Feedstocks. 2016 , 13-38		4
1134	Recent developments and future prospects on bio-based polyesters derived from renewable resources: A review. 2016 , 82, 1028-40		138
1133	Synthesis of ethylene glycol and terephthalic acid from biomass for producing PET. <i>Green Chemistry</i> , 2016 , 18, 342-359	10	181

1132	One pot direct catalytic conversion of cellulose to C3 and C4 hydrocarbons using Pt/H-USY zeolite catalyst at low temperature. 2016 , 141, 123-129		11
1131	Reaction Pathways and Mechanisms in Thermocatalytic Biomass Conversion I. 2016 ,		5
1130	Base-Catalyzed Reactions in Biomass Conversion: Reaction Mechanisms and Catalyst Deactivation. 2016 , 87-122		1
1129	Integrated reduction and acid-catalysed conversion of furfural in alcohol medium using Zr,Al-containing ordered micro/mesoporous silicates. 2016 , 182, 485-503		77
1128	The conversion of 5-hydroxymethyl furfural (HMF) to maleic anhydride with vanadium-based heterogeneous catalysts. <i>Green Chemistry</i> , 2016 , 18, 643-647	10	56
1127	Highly dispersed Cu nanoparticles as an efficient catalyst for the synthesis of the biofuel 2-methylfuran. 2016 , 6, 767-779		62
1126	Pretreatment and saccharification of red macroalgae to produce fermentable sugars. 2016 , 199, 311-318		72
1125	Vapor phase hydrogenation of aqueous levulinic acid over hydroxyapatite supported metal (M = Pd, Pt, Ru, Cu, Ni) catalysts.. 2016 , 180, 113-120		103
1124	Direct transformation of carbohydrates to the biofuel 5-ethoxymethylfurfural by solid acid catalysts. <i>Green Chemistry</i> , 2016 , 18, 726-734	10	121
1123	Catalytic transfer hydrogenation of biomass-derived levulinic acid and its esters to γ -valerolactone over ZrO ₂ catalyst supported on SBA-15 silica. 2017 , 281, 418-428		95
1122	A Systems-Level Roadmap for Biomass Thermal Fractionation and Catalytic Upgrading Strategies. 2017 , 5, 130-150		19
1121	Interactions between <i>Bacillus cereus</i> CGMCC 1.895 and <i>Clostridium beijerinckii</i> NCIMB 8052 in coculture for butanol production under nonanaerobic conditions. 2017 , 64, 719-726		14
1120	Gas phase conversion of eugenol into various hydrocarbons and platform chemicals. 2017 , 7, 2527-2543		19
1119	Effect of Reduction Protocol of Pd Catalysts on Product Distribution in Furfural Hydrogenation. 2017 , 2, 24-32		29
1118	Producing jet fuel from biomass lignin: Potential pathways to alkyl-benzenes and cycloalkanes. 2017 , 72, 673-722		119
1117	Aegle marmelos in heterocyclization: greener, highly efficient, one-pot three-component protocol for the synthesis of highly functionalized 4H-benzochromenes and 4H-chromenes. 2017 , 7, 7315-7328		37
1116	Catalytic transfer hydrogenation of levulinic acid to γ -valerolactone over a bifunctional tin catalyst. 2017 , 7, 1026-1031		36
1115	Cyclopentanone as an Alternative Linking Reactant for Heterogeneously Catalyzed Furfural Aldol Condensation. 2017 , 9, 1765-1770		23

1114	Recent advances in the production of γ -valerolactone from biomass-derived feedstocks via heterogeneous catalytic transfer hydrogenation. 2017 , 92, 1125-1135	74
1113	In situ upgrading of pyrolysis biofuels by bentonite clay with simultaneous production of heterogeneous adsorbents for water treatment. 2017 , 195, 273-283	19
1112	Catalyst Deactivation in Pyridine-Assisted Selective Dehydration of Methyl Lactate on NaY. 2017 , 7, 1912-1930	11
1111	A sustainable approach to empower the bio-based future: upgrading of biomass process intensification. <i>Green Chemistry</i> , 2017 , 19, 1624-1627	10 34
1110	Production of Benzene from 2-Hydroxybenzaldehyde by Various Reaction Paths using IRC Calculations within a DFT framework. 2017 , 2, 1556-1564	9
1109	Selective oxidation of lignocellulosic biomass to formic acid and high-grade cellulose using tailor-made polyoxometalate catalysts. 2017 , 202, 99-109	26
1108	Experimental and First-Principles Evidence for Interfacial Activity of Ru/TiO ₂ for the Direct Conversion of m-Cresol to Toluene. 2017 , 9, 2642-2651	31
1107	Dehydration of sorbitol to isosorbide over sulfonic acid resins under solvent-free conditions. 2017 , 537, 66-73	26
1106	Characterization and catalytic properties of molybdenum supported on nano gamma Al ₂ O ₃ for upgrading of anisole model compound. 2017 , 319, 143-154	24
1105	Simplex Lattice Approach to Optimize Yields of Light Oil Products from Catalytic Cracking of Bio-Oil with Mixed Catalysts. 2017 , 204, 677-688	5
1104	Lignin Fragmentation onto Multifunctional Fe ₃ O ₄ @Nb ₂ O ₅ @ Catalysts: The Role of the Composition and Deposition Route of Rhenium. 2017 , 7, 3257-3267	21
1103	Selective C ₁₀ Hydrogenolysis of Erythritol over Supported Rh-ReO _x Catalysts in the Aqueous Phase. 2017 , 9, 2768-2783	27
1102	Advanced biofuels production by upgrading of pyrolysis bio-oil. 2017 , 6, e245	52
1101	Biochemical and biophysical properties of a metagenome-derived GH5 endoglucanase displaying an unconventional domain architecture. 2017 , 99, 384-393	14
1100	Catalytic routes to fuels from C and oxygenate molecules. 2017 , 197, 9-39	15
1099	Beneficial effects of calcium chloride on glucose dehydration to 5-hydroxymethylfurfural in the presence of alumina as catalyst. 2017 , 206, 617-625	58
1098	Biopolymers from Sugarcane and Soybean Lignocellulosic Biomass. 2017 , 227-253	7
1097	Alkali promotion of alumina-supported ruthenium catalysts for hydrogenation of levulinic acid to γ -valerolactone. 2017 , 347, 72-78	38

1096	Efficient Production of 5-Hydroxymethylfurfural from Carbohydrates Catalyzed by Mesoporous AlB Hybrids. 2017 , 8, 1371-1378	3
1095	Thermochemistry analyses for transformation of C6 glucose compound into C9, C12 and C15 alkanes using density functional theory. 2017 , 115, 413-423	4
1094	One-pot conversion of biomass-derived xylose and furfural into levulinate esters via acid catalysis. 2017 , 53, 2938-2941	69
1093	A Sustainable Bioeconomy. 2017 ,	20
1092	Multistage torrefaction and in situ catalytic upgrading to hydrocarbon biofuels: analysis of life cycle energy use and greenhouse gas emissions. 2017 , 10, 1034-1050	29
1091	Solventless C-C Coupling of Low Carbon Furanics to High Carbon Fuel Precursors Using an Improved Graphene Oxide Carbocatalyst. 2017 , 7, 3905-3915	51
1090	Biofuels and Bioenergy. 2017 , 79-139	3
1089	CoxPy Catalysts in HDO of Phenol and Dibenzofuran: Effect of P content. 2017 , 60, 1094-1107	12
1088	Aqueous phase hydrogenation of furfural using carbon-supported Ru and RuSn catalysts. 2017 , 296, 43-50	56
1087	Selective arabinose extraction from Pinus sp. sawdust by two-step soft acid hydrolysis. 2017 , 104, 229-236	13
1086	Highly selective aerobic oxidation of biomass alcohol to benzaldehyde by an in situ doped Au/TiO ₂ nanotube photonic crystal photoanode for simultaneous hydrogen production promotion. 2017 , 5, 12407-12415	31
1085	Progress in biofuel production from gasification. 2017 , 61, 189-248	349
1084	Efficient Production of the Liquid Fuel 2,5-Dimethylfuran from 5-Hydroxymethylfurfural in the Absence of Acid Additive over Bimetallic PdAu Supported on Graphitized Carbon. 2017 , 31, 6364-6373	30
1083	Cobalt-Catalyzed Alkylation of Secondary Alcohols with Primary Alcohols via Borrowing Hydrogen/Hydrogen Autotransfer. 2017 , 23, 12110-12113	81
1082	One-Pot Selective Conversion of Hemicellulose to Xylitol. 2017 , 21, 165-170	28
1081	Multi-product biorefineries from lignocelluloses: a pathway to revitalisation of the sugar industry?. 2017 , 10, 87	112
1080	Manganese-Catalyzed Aminomethylation of Aromatic Compounds with Methanol as a Sustainable C1 Building Block. 2017 , 139, 8812-8815	134
1079	Aldose to ketose interconversion: galactose and arabinose isomerization over heterogeneous catalysts. 2017 , 7, 5321-5331	16

1078	Catalytic Aerobic Oxidation of Biomass-based Furfural into Maleic Acid in Aqueous Phase with Metalloporphyrin Catalysts. 2017 , 64, 786-794	19
1077	Increasing the revenue from lignocellulosic biomass: Maximizing feedstock utilization. 2017 , 3, e1603301	244
1076	Continuous Microflow Synthesis of Fuel Precursors from Platform Molecules Catalyzed by 1,5,7-Triazabicyclo[4.4.0]dec-5-ene. 2017 , 21, 890-896	7
1075	Biomass catalytic fast pyrolysis over hierarchical ZSM-5 and Beta zeolites modified with Mg and Zn oxides. 2017 , 7, 289-304	55
1074	Redox Catalysis Facilitates Lignin Depolymerization. 2017 , 3, 621-628	137
1073	Directional liquefaction of biomass for phenolic compounds and in situ hydrodeoxygenation upgrading of phenolics using bifunctional catalysts. 2017 , 135, 1-13	21
1072	Biosynthesis of medium chain length alkanes for bio-aviation fuel by metabolic engineered Escherichia coli. 2017 , 239, 542-545	11
1071	Greening the Indian Transport Sector: Role of Biodiesel. 2017 , 91-104	
1070	The Pivotal Role of Catalysis in France: Selected Examples of Recent Advances and Future Prospects.. 2017 , 9, 2029-2064	1
1069	Comparative study on microwave and conventional hydrothermal pretreatment of bamboo sawdust: Hydrochar properties and its pyrolysis behaviors. 2017 , 146, 1-7	101
1068	Graph-Based Analysis of Ethylene Glycol Decomposition on a Palladium Cluster. 2017 , 121, 13606-13616	5
1067	MCR-ALS applied to the quantification of the 5-hydroxymethylfurfural using UV spectra: Study of catalytic process employing experimental design. 2017 , 167, 132-138	4
1066	Effects of cations, anions and H ⁺ concentration of acidic ionic liquids on the valorization of polysaccharides into furfural. 2017 , 41, 6137-6144	35
1065	Applications of light olefin oligomerization to the production of fuels and chemicals. 2017 , 543, 82-97	80
1064	Artificial neural network based predictions of cetane number for furanic biofuel additives. 2017 , 206, 171-179	44
1063	Pyrolysis reaction models of waste tires: Application of Master-Plots method for energy conversion via devolatilization. 2017 , 68, 405-411	48
1062	Production of Platform Chemicals from Sustainable Resources. 2017 ,	19
1061	Modification of hydrothermal liquefaction products from Arthrospira platensis by using carbon dioxide. 2017 , 24, 148-153	7

1060	Integrated processes of anaerobic digestion and pyrolysis for higher bioenergy recovery from lignocellulosic biomass: A brief review. 2017 , 77, 1272-1287	89
1059	A Pd-Catalyzed in situ domino process for mild and quantitative production of 2,5-dimethylfuran directly from carbohydrates. <i>Green Chemistry</i> , 2017 , 19, 2101-2106	10 49
1058	Green Technologies and Environmental Sustainability. 2017 ,	12
1057	Refinery approach of bio-oils derived from fast pyrolysis of lignin to jet fuel range hydrocarbons: Reaction network development for catalytic conversion of cyclohexanone. 2017 , 121, 393-406	23
1056	Catalytic application of layered double hydroxide-derived catalysts for the conversion of biomass-derived molecules. 2017 , 7, 1622-1645	121
1055	Precious Metals for Environmental Catalysis: Gold. 2017 , 181-209	
1054	How Inter- and Intramolecular Reactions Dominate the Formation of Products in Lignin Pyrolysis. 2017 , 23, 8658-8668	10
1053	Flow Behavior and Aging of Pyrolysis Oils from Different Feedstocks. 2017 , 31, 5165-5173	8
1052	A Computational Kinetics Study on the Intramolecular Hydrogen Shift Reactions of Alkylperoxy Radicals in 2-Methyltetrahydrofuran Oxidation. 2017 , 49, 419-437	4
1051	Surface Properties of Hydrotalcite-Based Zn(Mg)Al Oxides and Their Catalytic Activity in Aldol Condensation of Furfural with Acetone. 2017 , 56, 4638-4648	39
1050	Production of Gasoline Fuel from Alga-Derived Botryococcene by Hydrogenolysis over Ceria-Supported Ruthenium Catalyst. 2017 , 9, 2701-2708	15
1049	Reaction Mechanism for the Conversion of γ -Valerolactone (GVL) over a Ru Catalyst: A First-Principles Study. 2017 , 56, 3217-3222	8
1048	Glucose Isomerization by Enzymes and Chemo-catalysts: Status and Current Advances. 2017 , 7, 3010-3029	101
1047	Efficient green catalysis for the conversion of fructose to levulinic acid. 2017 , 539, 70-79	63
1046	Vapor Phase Hydrogenolysis of Furanics Utilizing Reduced Cobalt Mixed Metal Oxide Catalysts. 2017 , 9, 1815-1823	13
1045	Construction of a novel d-lactate producing pathway from dihydroxyacetone phosphate of the Calvin cycle in cyanobacterium, <i>Synechococcus elongatus</i> PCC7942. 2017 , 124, 54-61	20
1044	Plasma upgrading of 4methylanisole: A novel approach for hydrodeoxygenation of bio oil without using a hydrogen source. 2017 , 121, 113-124	26
1043	Heterogeneous Catalysis: A Central Science for a Sustainable Future. 2017 , 50, 517-521	160

1042	Efficient conversion of fructose into 5-ethoxymethylfurfural with hydrogen sulfate ionic liquids as co-solvent and catalyst. 2017 , 314, 508-514	64
1041	The evolution of the biofuel science. 2017 , 76, 1479-1484	62
1040	Investigations on the Synergistic Effects of Oxygen and CaO for Biotars Cracking during Biomass Gasification. 2017 , 31, 587-598	6
1039	An Overview of the Recent Advances in the Application of Metal Oxide Nanocatalysts for Biofuel Production. 2017 , 255-299	0
1038	Kinetics of the hydrodeoxygenation of cresol isomers over Ni ₂ P/SiO ₂ : Proposals of nature of deoxygenation active sites based on an experimental study. 2017 , 205, 357-367	51
1037	Direct Synthesis of Renewable Dodecanol and Dodecane with Methyl Isobutyl Ketone over Dual-Bed Catalyst Systems. 2017 , 10, 825-829	11
1036	Benzoic Acid/TEMPO as a Highly Efficient Metal-Free Catalyst System for Selective Oxidation of 5-hydroxymethylfurfural into 2, 5-diiformylfuran. 2017 , 5, 1429-1434	6
1035	Highly efficient formic acid-mediated oxidation of renewable furfural to maleic acid with H ₂ O ₂ . <i>Green Chemistry</i> , 2017 , 19, 914-918	10 56
1034	Catalytic Transfer Hydrogenation of Biomass-Derived Levulinic Acid and Its Esters to γ -Valerolactone over Sulfonic Acid-Functionalized UiO-66. 2017 , 5, 1141-1152	145
1033	A novel and highly efficient Zr-containing catalyst based on humic acids for the conversion of biomass-derived ethyl levulinate into gamma-valerolactone. 2017 , 193, 322-330	36
1032	Graphene-Based Metal/Acid Bifunctional Catalyst for the Conversion of Levulinic Acid to γ -Valerolactone. 2017 , 5, 1538-1548	42
1031	Nanotechnology for Bioenergy and Biofuel Production. 2017 ,	17
1030	Valorisation of post-sorption materials: Opportunities, strategies, and challenges. 2017 , 242, 35-58	59
1029	Renewable Biofuels. 2017 ,	2
1028	Efficient Hydrogenation of Biomass Oxoacids to Lactones by Using NHC-Iridium Coordination Polymers as Solid Molecular Catalysts. 2017 , 12, 355-360	24
1027	One-step Preparation of Carbon-based Solid Acid Catalyst from Water Hyacinth Leaves for Esterification of Oleic Acid and Dehydration of Xylose. 2017 , 12, 3178-3186	23
1026	When 2nd generation biofuel meets water – The water solubility and phase stability issue. 2017 , 209, 615-623	17
1025	Recent advances on the utilization of layered double hydroxides (LDHs) and related heterogeneous catalysts in a lignocellulosic-feedstock biorefinery scheme. <i>Green Chemistry</i> , 2017 , 19, 5269-5302	10 60

1024	Thermodynamics of enzyme-catalyzed esterifications: II. Levulinic acid esterification with short-chain alcohols. 2017 , 101, 7509-7521		20
1023	Effect of Aldehyde and Carboxyl Functionalities on the Surface Chemistry of Biomass-Derived Molecules. 2017 , 33, 11919-11929		5
1022	Using recyclable pH-responsive lignin amphoteric surfactant to enhance the enzymatic hydrolysis of lignocelluloses. <i>Green Chemistry</i> , 2017 , 19, 5479-5487	10	29
1021	Upgrading of oxygenated compounds present in aqueous biomass-derived feedstocks over NbOx-based catalysts. 2017 , 7, 5495-5499		14
1020	Efficient one-pot production of γ -valerolactone from xylose over Zr-Al-Beta zeolite: rational optimization of catalyst synthesis and reaction conditions. <i>Green Chemistry</i> , 2017 , 19, 5114-5121	10	41
1019	Hydrolysis of Cellulose and Glucose Using Recyclable β -Hydroxysulfonic Acids. 2017 , 56, 12529-12537		5
1018	Influence of Mg/Al Mixed Oxide Compositions on Their Properties and Performance in Aldol Condensation. 2017 , 56, 13411-13422		39
1017	Conversion of levulinic acid and alkyl levulinates into biofuels and high-value chemicals. <i>Green Chemistry</i> , 2017 , 19, 5527-5547	10	135
1016	Aldol condensation of biomass-derived platform molecules over amine-grafted hierarchical FAU-type zeolite nanosheets (Zeolean) featuring basic sites. 2017 , 53, 12185-12188		29
1015	Efficient Conversion of Bio-Lactic Acid to 2,3-Pentanedione on Cesium-Doped Hydroxyapatite Catalysts with Balanced Acid/Base Sites. 2017 , 9, 4621-4627		18
1014	Comparative analysis of pyrolytic liquid products of beech wood, flax shives and woody biomass components. 2017 , 127, 269-277		21
1013	Rhenium-catalyzed deoxydehydration of renewable biomass using sacrificial alcohol as reductant. 2017 , 58, 3760-3763		11
1012	Direct use of humic acid mixtures to construct efficient Zr-containing catalysts for Meerwein-Ponndorf-Verley reactions. <i>Green Chemistry</i> , 2017 , 19, 4829-4837	10	40
1011	Catalytic production of 1,4-pentanediol from corn stover. 2017 , 245, 442-448		12
1010	Novel Strategies for the Production of Fuels, Lubricants, and Chemicals from Biomass. 2017 , 50, 2589-2597		115
1009	Catalytic Conversion of Biomass into Hydrocarbons over Noble-Metal-Free VO-Substituted Potassium Salt of Phosphotungstic Acid. 2017 , 2, 8625-8631		3
1008	Ordered Mesoporous Silica-Based Catalysts for Biomass Conversion. 2017 , 99-125		1
1007	Recent Developments in the Use of Porous Carbon Materials for Cellulose Conversion. 2017 , 79-98		3

1006	Nickel Phosphides Supported on HZSM-5 for Catalytic Hydrodeoxygenation of Eugenol: Effect of Phosphorus Content. 2017 , 2, 7525-7529	12
1005	5-Hydroxymethylfurfural catalytic oxidation under mild conditions by Co (II), Fe (III) and Cu (II) Salen complexes supported on SBA-15: Synthesis, characterization and activity. 2017 , 547, 132-145	40
1004	Theoretical Study of the Ring-Opening of Epoxides Catalyzed by Boronic Acids and Pyridinic Bases. 2017 , 121, 16300-16307	10
1003	Upgrading Algae Biocrude for a Low-Nitrogen-Containing Biofuel: Compositions, Intermediates, and Reaction Routes. 2017 , 56, 6378-6390	14
1002	Grand challenges for catalysis in the Science and Technology Roadmap on Catalysis for Europe: moving ahead for a sustainable future. 2017 , 7, 5182-5194	55
1001	Low-Temperature Direct Catalytic Hydrothermal Conversion of Biomass Cellulose to Light Hydrocarbons over Pt/Zeolite Catalysts. 2017 , 2, 6201-6205	6
1000	Detailed Kinetic Investigations on the Selective Oxidation of Biomass to Formic Acid (OxFA Process) Using Model Substrates and Real Biomass. 2017 , 5, 7383-7392	25
999	Efficient Furfuryl Alcohol Synthesis from Furfural over Magnetically Recoverable Catalysts: Does the Catalyst Stabilizing Medium Matter?. 2017 , 2, 5485-5491	12
998	Synthesis of Diesel and Jet Fuel Range Alkanes with Furfural and Angelica Lactone. 2017 , 7, 5880-5886	68
997	Molecular modelling approach to elucidate the thermal decomposition routes of vanillin. 2017 , 41, 8845-8859	11
996	Reduced Cu ₂ O/Al Mixed Metal Oxides for the Ring-Opening of Furfuryl Alcohol to Produce Renewable Diols. 2017 , 5, 8959-8969	29
995	Nanocomposite of MoS ₂ -RGO as Facile, Heterogeneous, Recyclable, and Highly Efficient Green Catalyst for One-Pot Synthesis of Indole Alkaloids. 2017 , 5, 8551-8567	47
994	In situ generated Ni(0)@boehmite from NiAl-LDH: An efficient catalyst for selective hydrogenation of biomass derived levulinic acid to γ -valerolactone. 2017 , 102, 40-43	30
993	Hydrodeoxygenation of Sorbitol to Monofunctional Fuel Precursors over Co/TiO ₂ . 2017 , 1, 178-199	18
992	Effects of phosphorus on CC, CO, and CH bond rupture during acetic acid decomposition over Ru(0001) and Pt-Ru(0001). 2017 , 353, 181-191	5
991	Catalysis in Lignocellulosic Biorefineries: The Case of Lignin Conversion. 2017 , 537-584	12
990	Performance of Nickel Supported on γ -Alumina Obtained by Aluminum Recycling for Methane Dry Reforming. 2017 , 147, 2057-2066	7
989	Reformulation of Gasoline To Replace Aromatics by Biomass-Derived Alkyl Levulinates. 2017 , 5, 7118-7127	20

988	Catalytic Upgrading of Glycerol, Conversion of Biomass Derived Carbohydrates to Fuels and Catalysis in Depolymerization of Lignin. 2017 , 113-139	
987	The controlled catalytic oxidation of furfural to furoic acid using AuPd/Mg(OH) ₂ . 2017 , 7, 5284-5293	49
986	Carboxylic acid formation by hydroxyl insertion into acyl moieties on late transition metals. 2017 , 7, 5365-5375	1
985	Improvement in ethanol productivity of engineered E. coli strain SSY13 in defined medium via adaptive evolution. 2017 , 44, 1375-1384	8
984	Valorization of biomass to hydroxymethylfurfural, levulinic acid, and fatty acid methyl ester by heterogeneous catalysts. 2017 , 328, 246-273	156
983	Synthesis of jet fuel range cycloalkane from isophorone with glycerol as a renewable hydrogen source. 2017 , 298, 16-20	11
982	Ring Opening of Biomass-Derived Cyclic Ethers to Dienes over Silica/Alumina. 2017 , 7, 5248-5256	25
981	A thermodynamic and kinetic analysis of solvent-enhanced selectivity in monophasic and biphasic reactor systems. 2017 , 53, 8148-8151	7
980	Catalysis for Green Energy and Technology. 2017 ,	2
979	Toward a better understanding of 2-butanone oxidation: Detailed species measurements and kinetic modeling. 2017 , 184, 195-207	38
978	A Highly Porous Carbon Support Rich in Graphitic-N Stabilizes Copper Nanocatalysts for Efficient Ethanol Dehydrogenation. 2017 , 9, 505-510	21
977	Lignin-derived multi-cyclic high density biofuel by alkylation and hydrogenated intramolecular cyclization. 2017 , 158, 64-69	48
976	Deoxygenation of octanoic acid catalyzed by hollow spherical Ni/ZrO ₂ . 2017 , 529, 79-90	15
975	State of the art and prospective of lipase-catalyzed transesterification reaction for biodiesel production. 2017 , 141, 339-353	189
974	Influence of W on the reduction behaviour and Brønsted acidity of Ni/TiO ₂ catalyst in the hydrogenation of levulinic acid to valeric acid: Pyridine adsorbed DRIFTS study. 2017 , 531, 169-176	36
973	Selective One-Pot Production of High-Grade Diesel-Range Alkanes from Furfural and 2-Methylfuran over Pd/NbOPO. 2017 , 10, 747-753	36
972	Kinetic analysis of the catalytic hydrogenation of alkyl levulinates to γ -valerolactone. 2017 , 158, 545-551	26
971	Robust ruthenium catalysts for the selective conversion of stearic acid to diesel-range alkanes. 2017 , 201, 137-149	41

970	One-Pot Conversion of Carbohydrates into 5-(Hydroxymethyl)furfural using Heterogeneous Lewis-Acid and Brønsted-Acid Catalysts. 2017 , 5, 747-755	36
969	A model compound (methyl oleate, oleic acid, triolein) study of triglycerides hydrodeoxygenation over alumina-supported NiMo sulfide. 2017 , 201, 290-301	69
968	Advances in Upgrading Lignin Pyrolysis Vapors by Ex Situ Catalytic Fast Pyrolysis. 2017 , 5, 30-51	20
967	Hydrodeoxygenation of furans over Pd-FeOx/SiO ₂ catalyst under atmospheric pressure. 2017 , 201, 266-277	69
966	Performance of basic mixed oxides for aqueous-phase 5-hydroxymethylfurfural-acetone aldol condensation. 2017 , 201, 221-231	53
965	Kinetics of hydrogenation and hydrogenolysis of 2,5-dimethylfuran over noble metals catalysts under mild conditions. 2017 , 202, 557-568	33
964	Simulated Temperature Programmed Desorption of Acetaldehyde on CeO ₂ (111): Evidence for the Role of Oxygen Vacancy and Hydrogen Transfer. 2017 , 60, 446-458	12
963	A laminar flame investigation of 2-butanone, and the combustion-related intermediates formed through its oxidation. 2017 , 36, 1175-1183	17
962	The role of nanosized nickel particles in microwave-assisted dry reforming of lignin. 2017 , 309, 628-637	27
961	A review and future directions in techno-economic modeling and optimization of upstream forest biomass to bio-oil supply chains. 2017 , 67, 15-35	81
960	Upgrading of Biomass-Derived Furans into Value-Added Chemicals. 2017 , 273-303	1
959	. 2017 ,	
958	Catalytic Biomass Valorization. 2017 ,	3
957	Whole-Genome Identification and Expression Pattern of the Vicinal Oxygen Chelate Family in Rapeseed (L.). 2017 , 8, 745	9
956	Catalysis for a Sustainable Chemicals Production, Environment, and the Future. 2017 , 621-628	1
955	Algae-Derived Polyester Blends and Composites. 2017 , 459-497	
954	Response Surface Methodology Optimization of Biofuels Produced by Catalytic Pyrolysis of Residual Palm Oil from Empty Fruit Bunch over Magnesium Oxide. 2017 , 50, 727-736	3
953	Foundational techniques for catalyst design in the upgrading of biomass-derived multifunctional molecules. 2018 , 67, 1-30	20

952	Catalytic coupling of biomass-derived aldehydes into intermediates for biofuels and materials. 2018 , 8, 1777-1798	40
951	Highly selective hydrogenation of furfural to tetrahydrofurfuryl alcohol over MIL-101(Cr)-NH ₂ supported Pd catalyst at low temperature. 2018 , 39, 319-326	33
950	Utilization of lignite derivatives to construct Zr-based catalysts for the conversion of biomass-derived ethyl levulinate. 2018 , 217, 122-130	15
949	Aqueous Hydrogenation of Levulinic Acid to 1,4-Pentanediol over Mo-Modified Ru/Activated Carbon Catalyst. 2018 , 11, 1316-1320	51
948	Synergetic effects of bimetals in modified beta zeolite for lactic acid synthesis from biomass-derived carbohydrates.. 2018 , 8, 8965-8975	31
947	Dehydration of Carbohydrates to 5-Hydroxymethylfurfural over Lignosulfonate-Based Acidic Resin. 2018 , 6, 5645-5652	21
946	High-Quality Jet Fuel Blend Production by Oxygen-Containing Terpenoids Hydroprocessing. 2018 , 6, 4871-4879	5
945	Acid Modified H-USY Zeolite for Efficient Catalytic Transformation of Fructose to 5-Hydroxymethyl Furfural (Biofuel Precursor) in Methyl Isobutyl Ketone/Water Biphasic System. 2018 , 32, 3783-3791	32
944	Integrated process for electrocatalytic conversion of glycerol to chemicals and catalytic conversion of corn stover to fuels. 2018 , 163, 180-186	11
943	Selective conversion of acetone to isobutene and acetic acid on aluminosilicates: Kinetic coupling between acid-catalyzed and radical-mediated pathways. 2018 , 360, 66-80	22
942	Fuel Processing for Solid Oxide Fuel Cells. 2018 , 97-141	1
941	Modeling, Design, Construction, and Operation of Power Generators with Solid Oxide Fuel Cells. 2018 ,	1
940	Iron-based metalloporphyrins as efficient catalysts for aerobic oxidation of biomass derived furfural into maleic acid. 2018 , 452, 20-27	16
939	Efficient C-C coupling of bio-based furanics and carbonyl compounds to liquid hydrocarbon precursors over lignosulfonate derived acidic carbocatalysts. 2018 , 8, 2449-2459	24
938	SO ₄ 2 ⁻ /ZrO ₂ as catalyst for upgrading of pyrolysis oil by esterification. 2018 , 226, 190-194	17
937	Synergistic effect of natural chickpea leaf exudates acids in heterocyclization: a greener protocol for benzopyran synthesis. 2018 , 5, 170333	4
936	Kinetics of the Homogeneous and Heterogeneous Coupling of Furfural with Biomass-Derived Alcohols. 2018 , 10, 2387-2393	2
935	Upgrading Biocrude of Grindelia Squarrosa to Jet Fuel Precursors by Aqueous Phase Hydrodeoxygenation. 2018 , 6, 1832-1843	4

934	Efficient hydro-liquefaction of woody biomass over ionic liquid nickel based catalyst. 2018 , 113, 157-166	18
933	Influence of vanadate structure and support identity on catalytic activity in the oxidative cleavage of methyl ketones. 2018 , 359, 171-183	21
932	Cellulose Depolymerization over Heterogeneous Catalysts. 2018 , 51, 761-768	123
931	Influence of a Lewis acid and a Brønsted acid on the conversion of microcrystalline cellulose into 5-hydroxymethylfurfural in a single-phase reaction system of water and 1,2-dimethoxyethane.. 2018 , 8, 7235-7242	30
930	The Applications of Nanocomposite Catalysts in Biofuel Production. 2018 , 309-350	2
929	Oligomerization of light olefins over ZSM-5 and beta zeolite catalysts by modifying textural properties. 2018 , 553, 15-23	33
928	Bright Side of Lignin Depolymerization: Toward New Platform Chemicals. 2018 , 118, 614-678	934
927	Cellulase-Inspired Solid Acids for Cellulose Hydrolysis: Structural Explanations for High Catalytic Activity. 2018 , 8, 1464-1468	24
926	Zirconia catalysed acetic acid ketonisation for pre-treatment of biomass fast pyrolysis vapours. 2018 , 8, 1134-1141	25
925	Design of highly selective ethanol dehydration nanocatalysts for ethylene production. 2018 , 10, 4004-4009	7
924	Stability of Pd nanoparticles on carbon-coated supports under hydrothermal conditions. 2018 , 8, 1151-1160	24
923	Lignocellulose Liquefaction to Biocrude: A Tutorial Review. 2018 , 11, 997-1014	31
922	A structure-activity relationship study using DFT analysis of Brønsted-Lewis acidic ionic liquids and synergistic effect of dual acidity in one-pot conversion of glucose to value-added chemicals. 2018 , 42, 1423-1430	11
921	Current Advances in Bio-Oil Upgrading: A Brief Discussion. 2018 , 289-313	
920	A Succinct Review on Upgrading of Lignin-Derived Bio-oil Model Components. 2018 , 315-334	1
919	Thermodynamic Stability of Molybdenum Oxycarbides Formed from Orthorhombic Mo ₂ C in Oxygen-Rich Environments. 2018 , 122, 1223-1233	20
918	One-pot production of hydrocarbon oils from biomass derived γ -valerolactone. 2018 , 216, 747-751	10
917	Phenol preparation from catalytic pyrolysis of palm kernel shell at low temperatures. 2018 , 253, 214-219	21

916	High {0 0 1} faceted TiO ₂ nanoparticles for the valorization of oxygenated compounds present in aqueous biomass-derived feedstocks. 2018 , 358, 266-276		12
915	Encapsulation of ultrafine metal-oxide nanoparticles within mesopores for biomass-derived catalytic applications. 2018 , 9, 1854-1859		49
914	Hydrochar supported bimetallic NiFe nanocatalysts with tailored composition, size and shape for improved biomass steam reforming performance. <i>Green Chemistry</i> , 2018 , 20, 2788-2800	10	49
913	Optimization of Multiproduct Biorefinery Processes under Consideration of Biomass Supply Chain Management and Market Developments. 2018 , 57, 6980-6991		26
912	On the role of oxocarbenium ions formed in Brønsted acidic condition on γ -Al ₂ O ₃ surface in the ring-opening of γ -valerolactone. 2018 , 560, 66-72		10
911	Tetramethylpiperidine N-Oxyl (TEMPO), Phthalimide N-Oxyl (PINO), and Related N-Oxyl Species: Electrochemical Properties and Their Use in Electrocatalytic Reactions. 2018 , 118, 4834-4885		419
910	Cascade dehydrative amination of glycerol to oxazoline. 2018 , 8, 2954-2965		9
909	Quantum chemical study on gas phase decomposition of ferulic acid. 2018 , 116, 1895-1907		5
908	Kinetics study of levulinic acid production from corncobs by tin tetrachloride as catalyst. 2018 , 260, 150-156	20	
907	Bio-based liquid fuels as a source of renewable energy: A review. 2018 , 88, 82-98		57
906	Highly Efficient Hydrogenation of Levulinic Acid into γ -Valerolactone using an Iron Pincer Complex. 2018 , 11, 1474-1478		28
905	Fe-containing nanoparticles used as effective catalysts of lignin reforming to syngas and hydrogen assisted by microwave irradiation. 2018 , 20, 1		18
904	Aldol condensation among acetaldehyde and ethanol reactants on TiO ₂ : Experimental evidence for the kinetically relevant nucleophilic attack of enolates. 2018 , 361, 290-302		22
903	A novel route for the flexible preparation of hydrocarbon jet fuels from biomass-based platform chemicals: a case of using furfural and 2,3-butanediol as feedstocks. <i>Green Chemistry</i> , 2018 , 20, 2018-2026	10	30
902	Sustainable Routes for the Synthesis of Renewable Heteroatom-Containing Chemicals. 2018 , 6, 5694-5707	104	
901	Multi-component post-polymerization modification reactions of polymers featuring lignin-model compounds. 2018 , 9, 2109-2115		16
900	Catalytic oxidation of cellulose to formic acid in V(V)-Fe(III)-H ₂ SO ₄ aqueous solution with O ₂ . 2018 , 173, 197-204		12
899	Cycloketone condensation catalyzed by zirconia: Origin of reactant selectivity. 2018 , 361, 186-192		8

898	Single pot selective hydrogenation of furfural to 2-methylfuran over carbon supported iridium catalysts. <i>Green Chemistry</i> , 2018 , 20, 2027-2037	10	66
897	Quantum chemical study on gas phase pyrolysis of p-isopropenylphenol. 2018 , 81, 134-145		5
896	The impacts of compression ratio on the performance and emissions of ice powered by oxygenated fuels: A review. 2018 , 91, 19-32		13
895	Biochemicals from food waste and recalcitrant biomass via syngas fermentation: A review. 2018 , 248, 113-121		73
894	Mechanistic insights into formic acid dehydrogenation promoted by Cu-amino based systems. 2018 , 470, 290-294		5
893	Ketonization of levulinic acid and γ -valerolactone to hydrocarbon fuel precursors. 2018 , 302, 80-86		9
892	Hydrogenation of 5-hydroxymethylfurfural to 2,5 dimethylfuran over nickel supported tungsten oxide nanostructured catalyst. 2018 , 2, 191-198		36
891	Liquid fuels from biomass: An energy self-sustained process integrating H ₂ recovery and liquid refining. 2018 , 212, 353-363		14
890	Catalytic Tandem Reaction for the Production of Jet and Diesel Fuel Range Alkanes. 2018 , 6, 1060-1066		7
889	Insights into the improvement effect of Fe doping into the CeO ₂ catalyst for vapor phase ketonization of carboxylic acids. 2018 , 444, 22-33		15
888	Ketonization of oxygenated hydrocarbons on metal oxide based catalysts. 2018 , 302, 16-49		50
887	Influence of the Anion on the Oxidation of 5-Hydroxymethylfurfural by Using Ionic-Polymer-Supported Platinum Nanoparticle Catalysts. 2018 , 83, 19-23		18
886	Fermentation, thermochemical and catalytic processes in the transformation of biomass through efficient biorefineries. 2018 , 302, 61-72		47
885	Traversing the history of solid catalysts for heterogeneous synthesis of 5-hydroxymethylfurfural from carbohydrate sugars: A review. 2018 , 82, 2408-2425		99
884	Advances in Nanocatalyst Design for Biofuel Production. 2018 , 10, 1968-1981		40
883	Perspectives on Water Usage for Biofuels Production. 2018 ,		10
882	Aqueous-Phase Acetic Acid Ketonization over Monoclinic Zirconia. 2018 , 8, 488-502		27
881	An Overview of Biofuel. 2018 , 1-37		4

880	Synergistic effects of Nb ₂ O ₅ promoter on Ru/Al ₂ O ₃ for an aqueous-phase hydrodeoxygenation of glycerol to hydrocarbons. 2018 , 551, 49-62	12
879	Highly Efficient Gas-Phase Oxidation of Renewable Furfural to Maleic Anhydride over Plate Vanadium Phosphorus Oxide Catalyst. 2018 , 11, 612-618	32
878	Silica deposition as an approach for improving the hydrothermal stability of an alumina support during glycerol aqueous phase reforming. 2018 , 551, 13-22	25
877	Acid-catalyzed epoxide alcoholysis in the presence of indenyl molybdenum carbonyl complexes. 2018 , 855, 12-17	4
876	Improving economics of lignocellulosic biofuels: An integrated strategy for coproducing 1,5-pentanediol and ethanol. 2018 , 213, 585-594	48
875	Selectivity tuning over monometallic and bimetallic dehydrogenation catalysts: effects of support and particle size. 2018 , 8, 314-327	18
874	Clean combustion: Chemistry and diagnostics for a systems approach in transportation and energy conversion. 2018 , 65, 1-5	43
873	Vapor Phase Catalytic Transfer Hydrogenation (CTH) of Levulinic Acid to Valerolactone Over Copper Supported Catalysts Using Formic Acid as Hydrogen Source. 2018 , 148, 348-358	37
872	Techno-economic analysis of guayule (<i>Parthenium argentatum</i>) pyrolysis biorefining: Production of biofuels from guayule bagasse via tail-gas reactive pyrolysis. 2018 , 112, 82-89	22
871	Bifunctional role of Pd/MMT-K 10 catalyst in direct transformation of furfural to 1,2-pentanediol. 2018 , 309, 195-201	31
870	Production of bio-jet fuel from corncob by hydrothermal decomposition and catalytic hydrogenation: Lab analysis of process and techno-economics of a pilot-scale facility. 2018 , 227, 128-136	12
869	Hydrocarbon Fuel Production from Lignocellulosic Biomass by Solvolysis and Catalytic Cracking. 2018 , 61, 302-310	2
868	Design and Synthesis of Hyperbranched Aromatic Polymers for Catalysis. 2018 , 10,	7
867	Excess/deviation properties of binary mixtures of 2,5-dimethylfuran with furfuryl alcohol, methyl isobutyl ketone, 1-butanol and 2-butanol at temperature range of (293.15-323.15) K. 2018 , 73, 64	6
866	Production of cyclopentanone from furfural over Ru/C with AlPO and application in the synthesis of diesel range alkanes.. 2018 , 8, 37993-38001	17
865	. 2018 ,	9
864	Benign-by-Design Orange Peel-Templated Nanocatalysts for Continuous Flow Conversion of Levulinic Acid to N-Heterocycles. 2018 , 6, 16637-16644	25
863	Liquid-Liquid Equilibria of Formic Acid and Furfural in a Biphasic Aqueous-Organic System: Optimization of Solvent and Amine Extractant. 2018 ,	1

862	Selective Production of Furanic Ethers from Lignocellulosic Biomass over Mesoporous Zr-Incorporated SBA-15 Catalyst. 2018 , 3, 12504-12511	6
861	Electrochemical Studies of Bio-Oils: Conversion and Upgrading. 2018 , 86, 87-98	
860	Shell biorefinery: A comprehensive introduction. 2018 , 3, 318-327	45
859	A comparative study on the quality of bioproducts derived from catalytic pyrolysis of green microalgae <i>Spirulina (Arthrospira) plantensis</i> over transition metals supported on HMS-ZSM5 composite. 2018 , 43, 19902-19917	35
858	Direct catalytic co-conversion of cellulose and methane to renewable petrochemicals. 2018 , 8, 5632-5645	11
857	Autothermal pyrolysis of biomass due to intrinsic thermal decomposition effects. 2018 , 134, 1045-1057	12
856	Zeolite@Pd/Al ₂ O ₃ Core-Shell Catalyst for Efficient Hydrodeoxygenation of Phenolic Biomolecules. 2018 , 57, 14088-14095	8
855	Direct upstream integration of biogasoline production into current light straight run naphtha petrorefinery processes. 2018 , 3, 969-977	45
854	Production of High-Purity Allyl Alcohol by the Salting-Out Method from Formic Acid-Mediated Deoxydehydration of Glycerol. 2018 , 63, 3874-3880	4
853	Stabilisation of pyrolysis oils. 2018 , 193-247	6
852	In Situ Synthesis of Highly Dispersed Cu ₂ O Bimetallic Nanoparticles for Tandem Hydrogenation/Rearrangement of Bioderived Furfural in Aqueous-Phase. 2018 , 6, 14919-14925	28
851	Catalytic production of sugars and lignin from agricultural residues using dilute sulfuric acid in Valerolactone. 2018 , 119, 284-292	8
850	How Catalysts and Experimental Conditions Determine the Selective Hydroconversion of Furfural and 5-Hydroxymethylfurfural. 2018 , 118, 11023-11117	332
849	Synergetic Effect of Brønsted/Lewis Acid Sites and Water on the Catalytic Dehydration of Glucose to 5-Hydroxymethylfurfural by Heteropolyacid-Based Ionic Hybrids. 2018 , 7, 824-832	17
848	Catalytic activity of zeolite H ₂ For the preparation of fuels additives: Its product distribution and scale up calculation for the biofuel formation in a microwave assisted batch reactor. 2018 , 6, 6816-6827	2
847	Acidic Hydrothermal Dehydration of d-Glucose into Humins: Identification and Characterization of Intermediates. 2018 , 6, 13487-13493	31
846	Efficient conversion of 5-hydroxymethylfurfural to high-value chemicals by chemo- and bio-catalysis.. 2018 , 8, 30875-30886	82
845	Liquid phase conversion of lignocellulosic biomass using biphasic systems. 2018 , 118, 163-171	18

844	Highly Active and Selective NiFe/SiO ₂ Bimetallic Catalyst with Optimized Solvent Effect for the Liquid-Phase Hydrogenation of Furfural to Furfuryl Alcohol. 2018 , 6, 13287-13295	39
843	Hydrothermal SolubilizationHydrolysisDehydration of Cellulose to Glucose and 5-Hydroxymethylfurfural Over Solid Acid Carbon Catalysts. 2018 , 61, 1912-1927	27
842	Functionalised heterogeneous catalysts for sustainable biomass valorisation. 2018 , 47, 8349-8402	332
841	Decomposition of acetic acid over Ru and Ru/MgO catalyst clusters under DFT framework. 2018 , 711, 156-165	3
840	Fabrication of supported Au-CuOx nanohybrids by reduction-oxidation strategy for efficient oxidative esterification of 5-hydroxymethyl-2-furfural into dimethyl furan-2,5-dicarboxylate. 2018 , 567, 80-89	14
839	Contribution of Different NbOx Species in the Hydrodeoxygenation of 2,5-Dimethyltetrahydrofuran to Hexane. 2018 , 6, 13107-13113	18
838	Synthesis of Ethyl-4-ethoxy Pentanoate by Reductive Etherification of Ethyl Levulinate in Ethanol on Pd/SiO ₂ -C Catalysts. 2018 , 11, 3796-3802	4
837	Catalytic conversion of glucose to 5-hydroxymethylfurfural using zirconium-containing metal-organic frameworks using microwave heating.. 2018 , 8, 31618-31627	30
836	On the nature of active phases and sites in CO and CO ₂ hydrogenation catalysts. 2018 , 8, 5681-5707	49
835	Thermal Depolymerization of Biomass with Emphasis on Gasifier Design and Best Method for Catalytic Hot Gas Conditioning. 2018 , 13,	10
834	Elucidation of novel mechanisms to produce value-added chemicals from vapour phase conversion of ferulic acid. 2018 , 137, 1	2
833	Crosslinked chitosan films with controllable properties for commercial applications. 2018 , 120, 1256-1264	63
832	Route for Conversion of Furfural to Ethylcyclopentane. 2018 , 3, 10211-10215	0
831	Enhanced Furfural Yields from Xylose Dehydration in the γ -Valerolactone/Water Solvent System at Elevated Temperatures. 2018 , 11, 2321-2331	51
830	Catalytic Hydrogenation of Levulinic Acid into Gamma-Valerolactone Over Ni/HZSM-5 Catalysts. 2018 , 22, 129-135	10
829	Continuous pervaporation-assisted furfural production catalyzed by CrCl ₃ . <i>Green Chemistry</i> , 2018 , 20, 2903-2912	10 17
828	Dilute acid catalyzed fractionation and sugar production from bamboo shoot shell in γ -Valerolactone/water medium.. 2018 , 8, 17527-17534	11
827	Selective Coupling of Bioderived Aliphatic Alcohols with Acetone Using Hydrotalcite Derived Mg-Al Porous Metal Oxide and Raney Nickel. 2018 , 6, 8468-8475	11

826	Sulfonated mesoporous carbon and silica-carbon nanocomposites for biomass conversion. 2018 , 236, 518-545	65
825	Liquid Phase Conversion of Phenols into Aromatics over Magnetic Pt/NiO@Al ₂ O ₃ @Fe ₃ O ₄ Catalysts via a Coupling Process of Hydrodeoxygenation and Dehydrogenation. 2018 , 6, 10078-10086	10
824	Process Intensification by Exploiting Diluted 2nd Generation Bio-ethanol in the Low-Temperature Steam Reforming Process. 2018 , 61, 1832-1841	8
823	Solvent free cyclodehydration of sorbitol to isosorbide over mesoporous sulfated titania with enhanced catalytic performance. 2018 , 454, 77-86	12
822	Sidestreams From Bioenergy and Biorefinery Complexes as a Resource for Circular Bioeconomy. 2018 , 85-125	14
821	Mechanisms and Active Sites for C-O Bond Rupture within 2-Methyltetrahydrofuran over Ni, Ni ₁₂ P ₅ , and Ni ₂ P Catalysts. 2018 , 8, 7141-7157	21
820	Highly Efficient, Easily Recoverable, and Recyclable Re ₂ SiO ₂ @Fe ₃ O ₄ Catalyst for the Fragmentation of Lignin. 2018 , 6, 9606-9618	13
819	A Density Functional Theory Study of the Mechanism of Direct Glucose Dehydration to 5-Hydroxymethylfurfural on Anatase Titania. 2018 , 10, 4084-4089	22
818	Solid Phase Extraction of Bio-Oil Model Compounds and Lignin-Derived Bio-Oil Using Amine-Functionalized Mesoporous Silicas. 2018 , 6, 9716-9724	13
817	Improving stability of cyclopentanone aldol condensation MgO-based catalysts by surface hydrophobization with organosilanes. 2018 , 237, 835-843	34
816	Selective Deoxygenation of Aqueous Furfural to 2-Methylfuran over Cu ₀ /Cu ₂ O@SiO ₂ Sites via a Copper Phyllosilicate Precursor without Extraneous Gas. 2018 , 6, 12096-12103	28
815	Integrating reduced graphene oxide with microwave-subcritical water for cellulose depolymerization. 2018 , 8, 5434-5444	5
814	Micromorphology Influence on the Color Performance of Lignin and Its Application in Guiding the Preparation of Light-colored Lignin Sunscreen. 2018 , 6, 12532-12540	33
813	Selective Production of Terminally Unsaturated Methyl Esters from Lactones Over Metal Oxide Catalysts. 2018 , 148, 3072-3081	5
812	High Catalytic Efficiency of Lignin Depolymerization over Low Pd-Zeolite Y Loading at Mild Temperature. 2018 , 6,	5
811	Enhanced Hydrolysis of Cellulose in Ionic Liquid Using Mesoporous ZSM-5. 2018 , 23,	14
810	Efficient Production of N-Butyl Levulinate Fuel Additive from Levulinic Acid Using Amorphous Carbon Enriched with Oxygenated Groups. 2018 , 8, 14	29
809	Waste into Fuel Catalyst and Process Development for MSW Valorisation. 2018 , 8, 113	20

808	Recent Trends in the Production, Combustion and Modeling of Furan-Based Fuels. 2018 , 11, 512	40
807	An Overview of Biorefinery Derived Platform Chemicals from a Cellulose and Hemicellulose Biorefinery. 2018 , 20, 1615-1630	174
806	Selective Hydrodeoxygenation of 5-Hydroxymethylfurfural to 2,5-Dimethylfuran over Ni Supported on Zirconium Phosphate Catalysts. 2018 , 3, 7407-7417	32
805	CO-Switchable Solvents as Entrainer in Fluid Separations. 2018 , 6, 10429-10435	11
804	Production of High-Density Renewable Aviation Fuel from Arid Land Crop. 2018 , 6, 10108-10119	10
803	Synergistic Production of Methyl Lactate from Carbohydrates Using an Ionic Liquid Functionalized Sn-Containing Catalyst. 2018 , 10, 4154-4161	5
802	Silylated Zeolites With Enhanced Hydrothermal Stability for the Aqueous-Phase Hydrogenation of Levulinic Acid to γ -Valerolactone. 2018 , 6, 143	12
801	Methane production from thermally pretreated <i>Scenedesmus obtusiusculus</i> biomass in semi-batch reactors at low reaction times. 2018 , 136, 61-68	9
800	Effect of the surface acid sites of tungsten trioxide for highly selective hydrogenation of cellulose to ethylene glycol. 2018 , 264, 58-65	10
799	Highly efficient conversion of plant oil to bio-aviation fuel and valuable chemicals by combination of enzymatic transesterification, olefin cross-metathesis, and hydrotreating. 2018 , 11, 30	19
798	Lignolytic-consortium omics analyses reveal novel genomes and pathways involved in lignin modification and valorization. 2018 , 11, 75	42
797	Influence of promoted bimetallic Ni-based catalysts and Micro/Mesopores carbonaceous supports for biomass hydrothermal conversion to H ₂ -rich gas. 2018 , 239, 383-397	32
796	Conversion of Sugars and Biomass to Furans Using Heterogeneous Catalysts in Biphasic Solvent Systems. 2018 , 10, 4805-4816	63
795	Rational Optimization of Reaction Conditions for the One-Pot Transformation of Furfural to γ -Valerolactone over Zr-Al-Beta Zeolite: Toward the Efficient Utilization of Biomass. 2018 , 57, 11592-11599	30
794	Physicochemical and thermal characteristics of sugarcane straw and its cellulignin. 2018 , 40, 1	8
793	Products distribution of catalytic co-pyrolysis of greenhouse vegetable wastes and coal. 2018 , 162, 953-963	19
792	Valorization of levulinic acid over non-noble metal catalysts: challenges and opportunities. <i>Green Chemistry</i> , 2018 , 20, 4391-4408	10 77
791	Computational Study on Ring Saturation of 2-Hydroxybenzaldehyde Using Density Functional Theory. 2018 , 3, 8546-8552	

790	Versatile catalysis of iron: tunable and selective transformation of biomass-derived furfural in aliphatic alcohol. <i>Green Chemistry</i> , 2018 , 20, 3092-3100	10	19
789	Controlling Competitive Side Reactions in the Electrochemical Upgrading of Furfural to Biofuel. 2018 , 6, 1370-1379		25
788	Life Cycle Assessment of Sugarcane Biorefinery. 2018 , 213-239		1
787	Synthesis of high-density aviation fuels with methyl benzaldehyde and cyclohexanone. <i>Green Chemistry</i> , 2018 , 20, 3753-3760	10	18
786	Cleave and couple: toward fully sustainable catalytic conversion of lignocellulose to value added building blocks and fuels. 2018 , 54, 7725-7745		38
785	Improved hydrothermal stability of Pd nanoparticles on nitrogen-doped carbon supports. 2018 , 8, 3548-3561		16
784	Catalytic Transfer Hydrogenation Using Biomass as Hydrogen Source. 2019 , 12, 3094-3098		21
783	Transportation Biofuels via the Pyrolysis Pathway: Status and Prospects. 2019 , 1081-1112		
782	Insights into the reaction pathway of hydrodeoxygenation of dibenzofuran over MgO supported noble-metals catalysts. 2019 , 319, 155-163		11
781	Study on co-pyrolysis synergistic mechanism of seaweed and rice husk by investigation of the characteristics of char/coke. 2019 , 132, 527-542		20
780	Homogeneous Metal Salt Solutions for Biomass Upgrading and Other Select Organic Reactions. 2019 , 9, 9923-9952		33
779	Long term storage stability of bio-oil from rice husk fast pyrolysis. 2019 , 186, 115882		12
778	Reductive C-O, C-N, and C-S Cleavage by a Zirconium Catalyzed Hydrometalation/Elimination Approach. 2019 , 21, 6983-6988		16
777	Cascade aldol condensation of an aldehyde via the aerobic oxidation of ethanol over an Au/NiO composite. 2019 , 1, 3654-3659		9
776	Two-step catalytic conversion of lignocellulose to alkanes.. 2019 , 9, 23727-23734		8
775	Synergistic effect between CaCl ₂ and Al ₂ O ₃ for furfural production by dehydration of hemicellulosic carbohydrates. 2019 , 585, 117188		14
774	Highly Selective Hydrogenation of Furfural to Cyclopentanone over a NiFe Bimetallic Catalyst in a Methanol/Water Solution with a Solvent Effect. 2019 , 7, 15221-15229		34
773	Interplay of Lewis and Brønsted Acid Sites in Zr-Based Metal-Organic Frameworks for Efficient Esterification of Biomass-Derived Levulinic Acid. 2019 , 11, 32090-32096		25

772	Photocatalytic conversion of lignocellulosic biomass to valuable products. <i>Green Chemistry</i> , 2019 , 21, 4266-4289	10	93
771	Reduction of furfural by Mn/2,4,6-Coll.HCl/H ₂ O: Mechanistic aspects of this reaction. 2019 , 33, e4948		0
770	Assessment of Photocatalytic Hydrogen Production from Biomass or Wastewaters Depending on the Metal Co-Catalyst and Its Deposition Method on TiO ₂ . 2019 , 9, 584		30
769	Kinetics of catalytic biomass pyrolysis using Ni-based functional materials. 2019 , 195, 106145		20
768	Catalytic dehydration of levoglucosan to levoglucosenone using Brønsted solid acid catalysts in tetrahydrofuran. <i>Green Chemistry</i> , 2019 , 21, 4988-4999	10	23
767	Hydrogenation of Furfural to Furfuryl Alcohol in the Presence of Ru-Containing Catalysts Based on New Zeolite-Like Materials. 2019 , 11, 130-137		4
766	Valorization of aqueous waste streams from thermochemical biorefineries. <i>Green Chemistry</i> , 2019 , 21, 4217-4230	10	20
765	Catalytic Conversion of Lignin in Woody Biomass into Phenolic Monomers in Methanol/Water Mixtures without External Hydrogen. 2019 , 7, 13764-13773		47
764	Hydrotreatment of pyrolysis bio-oil: A review. 2019 , 195, 106140		93
763	Optimization of fructose dehydration to 5-hydroxymethylfurfural catalyzed by SO ₃ H-bearing lignin-derived ordered mesoporous carbon. 2019 , 36, 1042-1050		16
762	p-Sulfonic acid calix[4]arene: A highly efficient organocatalyst for dehydration of fructose to 5-hydroxymethylfurfural. 2019 , 138, 111492		11
761	Bioalcohol production from acidogenic products via a two-step process: A case study of butyric acid to butanol. 2019 , 252, 113482		37
760	Hydrothermal conversion of lignin and black liquor for phenolics with the aids of alkali and hydrogen donor. 2019 , 2, 141-150		8
759	The Role of Gold Nanoparticles on Different Supports for the In-Air Conversion of Levulinic Acid into Valerolactone with Formic Acid as an Alternative Hydrogen Source. 2019 , 92, 1316-1323		3
758	Reaction Kinetics of Vanillin Hydrodeoxygenation in Acidic and Nonacidic Environments Using Bimetallic PdRh/Al ₂ O ₃ Catalyst. 2019 , 33, 11712-11723		1
757	Multistructural Anharmonicity Controls the Radical Generation Process in Biofuel Combustion. 2019 , 141, 18531-18543		11
756	Catalytic One-Pot Conversion of Renewable Platform Chemicals to Hydrocarbon and Ether Biofuels through Tandem Hf(OTf) + Pd/C Catalysis. 2019 , 12, 5217		7
755	Fundamental Insights into Deactivation by Leaching during Rhenium-Catalyzed Deoxydehydration. 2019 , 9, 11317-11328		9

754	Green CO ₂ -Assisted Synthesis of Mono- and Bimetallic Pd/Pt Nanoparticles on Porous Carbon Fabricated from Sorghum for Highly Selective Hydrogenation of Furfural. 2019 , 7, 15339-15345		33
753	Revealing the factors determining the selectivity of guaiacol HDO reaction pathways using ZrP-supported Co and Ni catalysts. 2019 , 377, 343-357		21
752	Formation of Five-Membered Carbocycles from d-Glucose: A Concise Synthesis of 4-Hydroxy-2-(hydroxymethyl)cyclopentenone. 2019 , 92, 1324-1328		3
751	Tailoring diesel bioblendstock from integrated catalytic upgrading of carboxylic acids: a fuel property first approach. <i>Green Chemistry</i> , 2019 , 21, 5813-5827	10	18
750	Solvolytic of Sugarcane Bagasse: Strategy To Increase the Yields of Secondary Fuel Precursors. 2019 , 58, 17736-17745		2
749	Contribution of Fourier transform mass spectrometry to bio-oil study. 2019 , 679-733		4
748	Computational design of catalysts for bio-waste upgrading. 2019 , 26, 20-27		4
747	A quantum chemical study of hydrogen adsorption on carbon-supported palladium clusters. 2019 , 21, 21577-21587		5
746	Effects of poplar addition on tar formation during the co-pyrolysis of fat coal and poplar at high temperature.. 2019 , 9, 28053-28060		3
745	Hierarchical FAU-Type Hafnosilicate Zeolite as a Robust Lewis Acid Catalyst for Catalytic Transfer Hydrogenation. 2019 , 7, 16329-16343		13
744	Subcritical Methanolysis of Starch and Transglycosidation to Produce Dodecyl Polyglucosides. 2019 , 4, 16372-16377		3
743	Comparative Study on the Dehydration of Biomass-Derived Disaccharides and Polysaccharides to 5-Hydroxymethylfurfural. 2019 , 33, 9985-9995		14
742	Solvation effect on binding modes of model lignin dimer compounds on MWW 2D-zeolite. 2019 , 151, 114708		1
741	Leather-Promoted Transformation of Glucose into 5-Hydroxymethylfurfural and Levoglucosenone. 2019 , 12, 1437-1442		6
740	Metabolomic and Transcriptomic Analyses of for Efficient Fermentation of L-Fucose. 2019 , 17,		5
739	Low temperature hydrodeoxygenation of guaiacol into cyclohexane over Ni/SiO catalyst combined with H ₂ zeolite.. 2019 , 9, 3868-3876		23
738	Mechanism study of the conversion of esters to high-octane-number aromatics over HZSM-5. 2019 , 33, e4673		2
737	Selective Glucose-to-Fructose Isomerization in Ethanol Catalyzed by Hydrotalcites. 2019 , 9, 2101-2109		48

736	Efficient synthesis of C fuel precursor by heterogeneously catalyzed aldol-condensation of furfural with cyclopentanone.. 2019 , 9, 3661-3668		13
735	Expanding of Phospholipid:Diacylglycerol AcylTransferase (PDAT) from <i>Saccharomyces cerevisiae</i> as Multifunctional Biocatalyst with Broad Acyl Donor/Acceptor Selectivity. 2019 , 188, 824-835		4
734	Manganese-Catalyzed Selective Upgrading of Ethanol with Methanol into Isobutanol. 2019 , 12, 3069-3072		22
733	Applications of Ion Exchange Materials in Chemical and Food Industries. 2019 ,		1
732	Upgrading of pyrolytic lignin into hexamethylbenzene with high purity: demonstration of the All-to-one Biochemical production strategy in thermo-chemical conversion. <i>Green Chemistry</i> , 2019 , 21, 1000-1005	10	12
731	Regioselective Hydrogenation of Itaconic Acid to γ -valerolactone by Transition-Metal Nanoparticle Catalysts. 2019 , 12, 973-977		4
730	Origins of complex solvent effects on chemical reactivity and computational tools to investigate them: a review. 2019 , 4, 165-206		65
729	Solvent-free catalytic conversion of xylose with methane to aromatics over Zn-Cr modified zeolite catalyst. 2019 , 253, 988-996		5
728	Improved Selectivity of Long-Chain Products from Aqueous Acetone/Butanol/Ethanol Mixture over High Water Resistant Catalyst Based on Hydrophobic SBA-16. 2019 , 7, 10323-10331		10
727	Investigation on co-pyrolysis of lignocellulosic biomass and amino acids using TG-FTIR and Py-GC/MS. 2019 , 196, 320-329		48
726	Enhanced bio-oil upgrading in biomass catalytic pyrolysis using KH-ZSM-5 zeolite with acid-base properties. 2019 , 1		8
725	The dawn of polymer chemistry based on multicomponent reactions. 2019 , 51, 945-953		40
724	Continuous flow conversion of alkyl levulinates into γ -valerolactone in the presence of Ru/C as catalyst. 2019 , 475, 110456		13
723	Challenges of biofilm control and utilization: lessons from mathematical modelling. 2019 , 16, 20190042		20
722	Enhanced Bio-Electro-Fenton degradation of phenolic compounds based on a novel Fe-Mn/Graphite felt composite cathode. 2019 , 234, 260-268		18
721	Synthesis of Biomass-Derived Ethers for Use as Fuels and Lubricants. 2019 , 12, 2835-2858		24
720	Recent development of production technology of diesel- and jet-fuel-range hydrocarbons from inedible biomass. 2019 , 193, 404-422		52
719	Conversion of C ₂ -Carboxylic Acids to Hydrocarbons on HZSM-5: Effect of Carbon Chain Length. 2019 , 58, 10307-10316		11

7 ¹⁸	Selective Conversion of Furfural to Cyclopentanone and Cyclopentanol by Magnetic Cu-Fe ₃ O ₄ NPs Catalyst. 2019 , 4, 5845-5852	5
7 ¹⁷	Control of root-knot nematodes by a mixture of maleic acid and copper sulfate. 2019 , 141, 61-68	6
7 ¹⁶	Hydroxyl Group Stabilization for Increased Yields of Low-Molecular-Weight Products in the Copyrolysis of Cellulose and Thermoplastics. 2019 , 58, 10776-10784	1
7 ¹⁵	Solid base pretreatment to improve the accessibility of lignocellulosic molecules for biomass recovery. 2019 , 26, 8453-8464	1
7 ¹⁴	When Will 5-Hydroxymethylfurfural, the "Sleeping Giant" of Sustainable Chemistry, Awaken?. 2019 , 12, 2976-2982	78
7 ¹³	High-Yielding Synthesis of 5-(alkoxymethyl)furfurals from Biomass-Derived 5-(halomethyl)furfural (X=Cl, Br). 2019 , 4, 5540-5543	6
7 ¹²	Carbonyl Reduction and Biomass: A Case Study of Sustainable Catalysis. 2019 , 7, 10182-10197	23
7 ¹¹	DFT investigation on thermochemical analyses of conversion of xylose to linear alkanes in aqueous phase. 2019 , 90, 199-209	4
7 ¹⁰	High-Temperature Grafting Silylation for Minimizing Leaching of Acid Functionality from Hydrophobic Mesoporous Silicas Used as Catalysts in the Liquid Phase. 2019 , 35, 6838-6852	13
7 ⁰⁹	Biomass-derived aviation fuels: Challenges and perspective. 2019 , 74, 31-49	93
7 ⁰⁸	Bioethanol production from cellulose obtained from the catalytic hydro-deoxygenation (lignin-first refined to aviation fuel) of apple wood. 2019 , 250, 245-253	13
7 ⁰⁷	Simultaneous activation of copper mixed metal oxide catalysts in alcohols for gamma-valerolactone production from methyl levulinate. 2019 , 579, 91-98	12
7 ⁰⁶	W ₁₈ O ₄₉ oxides with tunable acid properties as efficient catalysts for the transformation of biomass-derived oxygenates in aqueous systems. 2019 , 9, 3126-3136	13
7 ⁰⁵	Enhanced Levoglucosan Yields from the Copyrolysis of Cellulose and High-Density Polyethylene. 2019 , 7, 9480-9488	13
7 ⁰⁴	Catalytic co-pyrolysis of red cedar with methane to produce upgraded bio-oil. 2019 , 285, 121299	16
7 ⁰³	High-value utilization of kraft lignin: Color reduction and evaluation as sunscreen ingredient. 2019 , 133, 86-92	32
7 ⁰²	Chemistries and processes for the conversion of ethanol into middle-distillate fuels. 2019 , 3, 223-249	71
7 ⁰¹	Dehydration of Bioethanol to Ethylene over H-ZSM-5 Catalysts: A Scale-Up Study. 2019 , 9, 186	6

700	Catalytic Upgrading of Bio-oil for Production of Drop-In Fuels. 2019 , 1965-1983	2
699	Review of Biomass Resources and Conversion Technologies for Alternative Jet Fuel Production in Hawaii and Tropical Regions. 2019 , 33, 2699-2762	41
698	Direct Synthesis of Unsaturated Sugars from Methyl Glycosides. 2019 , 9, 3725-3729	16
697	Preparation of furans from catalytic conversion of corn stover in H ₂ O/HF co-solvent system – The effects of acids combined with alkali metal cations. 2019 , 97, 105-111	5
696	Biodiesel production from esterification of oleic acid by a sulfonated magnetic solid acid catalyst. 2019 , 139, 688-695	35
695	Hollow MFI Zeolite Supported Pt Catalysts for Highly Selective and Stable Hydrodeoxygenation of Guaiacol to Cycloalkanes. 2019 , 9,	12
694	Metal substituted pyrochlore phase Li _x La _{2-x} Ce _{1.8} Ru _{0.2} O _{7-x} (x = 0.0–0.6) as an effective catalyst for oxidative and auto-thermal steam reforming of ethanol. 2019 , 9, 1406-1419	6
693	New insights for the valorisation of glycerol over MgO catalysts in the gas-phase. 2019 , 9, 1464-1475	7
692	Biofuel Synthesis from Sorbitol by Aqueous Phase Hydrodeoxygenation over Bifunctional Catalysts: In-depth Study of the RuPt/SiO ₂ /Al ₂ O ₃ Catalytic System. 2019 , 9, 146	2
691	Aluminum alkoxy-catalyzed biomass conversion of glucose to 5-hydroxymethylfurfural: Mechanistic study of the cooperative bifunctional catalysis. 2019 , 40, 1599-1608	7
690	Production of biofuel intermediates from furfural via aldol condensation over K ₂ O clusters containing N-doped porous carbon materials with shape selectivity. 2019 , 281, 101-109	14
689	Photolytic C–O Bond Cleavage with Quantum Dots. 2019 , 31, 2677-2682	17
688	Influence of the Ether Functional Group on Ketohydroperoxide Formation in Cyclic Hydrocarbons: Tetrahydropyran and Cyclohexane. 2019 , 123, 3634-3646	7
687	Efficient Production of Furanic Diether in a Continuous Fixed Bed Reactor. 2019 , 11, 2179-2186	10
686	Generic Biphasic Catalytic Approach for Producing Renewable Diesel from Fatty Acids and Vegetable Oils. 2019 , 9, 3753-3763	16
685	Microbial Production and Properties of LA-based Polymers and Oligomers from Renewable Feedstock. 2019 , 361-390	3
684	Mechanistic insight into the self-coupling of 5-hydroxymethyl furfural to C fuel intermediate catalyzed by ionic liquids.. 2019 , 9, 10825-10831	1
683	Metal-Organic Framework Supported Palladium Nanoparticles: Applications and Mechanisms. 2019 , 36, 1800557	13

- 682 Critical temperatures and pressures, heat capacities, and thermal diffusivities of levulinic acid and four n-alkyl levulinates. **2019**, 135, 233-240 7
- 681 Au/NiO Composite: A Catalyst for One-Pot Cascade Conversion of Furfural. **2019**, 2, 2654-2661 13
- 680 Synthesis of 5-aminolevulinic acid with nontoxic reagents and renewable methyl levulinate.. **2019**, 9, 10091-10093
- 679 Production of Materials from Sustainable Biomass Resources. **2019**, 2 2
- 678 In-situ synthesis of single-atom Ir by utilizing metal-organic frameworks: An acid-resistant catalyst for hydrogenation of levulinic acid to 5-valerolactone. **2019**, 373, 161-172 57
- 677 Valorization of Biomass-derived Small Oxygenates: Kinetics, Mechanisms and Site Requirements of H₂-involved Hydrogenation and Deoxygenation Pathways over Heterogeneous Catalysts. **2019**, 11, 1824-1877¹⁰
- 676 The thermochemical conversion of biomass into biofuels. **2019**, 327-368 16
- 675 Efficient Synthesis of Furfural from Biomass Using SnCl₄ as Catalyst in Ionic Liquid. **2019**, 24, 14
- 674 Selective Conversion of Cellulose to Hydroxyacetone and 1-Hydroxy-2-Butanone with Sn-Ni Bimetallic Catalysts. **2019**, 12, 2154-2160 24
- 673 Catalytic Gasification of Biomass in Dual-Bed Gasifier for Producing Tar-Free Syngas. **2019**, 33, 2453-2466 12
- 672 Solid Acids for the Reaction of Bioderived Alcohols into Ethers for Fuel Applications. **2019**, 9, 172 5
- 671 "Traditional" Sol-Gel Chemistry as a Powerful Tool for the Preparation of Supported Metal and Metal Oxide Catalysts. **2019**, 12, 116
- 670 Hydrothermal carbon enriched with sulfonic and carboxyl groups as an efficient solid acid catalyst for butanolysis of furfuryl alcohol. **2019**, 123, 109-113 14
- 669 Hydrodeoxygenation of Octanoic Acid over Supported Ni and Mo Catalysts: Effect of Ni/Mo Ratio and Catalyst Recycling. **2019**, 4, 2229-2236 2
- 668 Multicomponent-Reaction-Ready Biomass-Sourced Organic Hybrids Fabricated via the Surface Immobilization of Polymers with Lignin-Based Compounds. **2019**, 7, 7795-7803 12
- 667 Use of Ion-Exchange Resins in Dehydration Reactions. **2019**, 1-18
- 666 Aldol Condensation of Cyclopentanone on Hydrophobized MgO. Promotional Role of Water and Changes in the Rate-Limiting Step upon Organosilane Functionalization. **2019**, 9, 2831-2841 26
- 665 Ru-Catalyzed Oxidative Cleavage of Guaiacyl Glycerol--Guaiacyl Ether-a Representative -O-4 Lignin Model Compound. **2019**, 9, 832 3

664	Selective Conversion of Glucose to 5-Hydroxymethylfurfural by Using L-Type Zeolites with Different Morphologies. 2019 , 9, 1073		11
663	An integrated strategy for the production of hydrocarbon fuels from lignocellulosic biomass. 2019 ,		
662	First-principles study on the gas-phase decomposition of bio-oil oxygenated compounds over the palladium catalyst surface. 2019 , 21, 22320-22330		1
661	Reaction engineering implications of cellulose crystallinity and water-promoted recrystallization. <i>Green Chemistry</i> , 2019 , 21, 5541-5555	10	19
660	Environmental and Safety Assessments of Industrial Production of Levulinic Acid via Acid-Catalyzed Dehydration. 2019 , 4, 22302-22312		14
659	Investigation of solvent effects on the hydrodeoxygenation of guaiacol over Ru catalysts. 2019 , 9, 6253-6273		13
658	Solvent basicity controlled deformylation for the formation of furfural from glucose and fructose. <i>Green Chemistry</i> , 2019 , 21, 6146-6153	10	16
657	Aqueous Carbonylation of Furfural-Derived 5-Bromofuroic Acid to 2,5-Furandicarboxylic Acid with Supported Palladium Catalyst. 2019 , 58, 22951-22957		6
656	Ga/HZSM-5 Catalysed Acetic Acid Ketonisation for Upgrading of Biomass Pyrolysis Vapours. 2019 , 9, 841		11
655	Tailor-made biofuel 2-butyltetrahydrofuran from the continuous flow hydrogenation and deoxygenation of furfuralacetone. <i>Green Chemistry</i> , 2019 , 21, 6299-6306	10	11
654	Green Technologies for Biomass Upgrading and Relevant Processes. 2019 , 23, 2143-2144		2
653	Selective hydrogenolysis of 5-(hydroxymethyl)furfural over Pd/C catalyst to 2,5-dimethylfuran. 2019 , 23, 439-451		22
652	Catalytic Conversion of Ethanol to Commodity and Specialty Chemicals. 2019 , 3-24		9
651	Facile and High-Yield Synthesis of Alkyl Levulinate Directly from Furfural by Combining Zr-MCM-41 and Amberlyst-15 without External H ₂ . 2019 , 33, 330-339		11
650	Covalently linked organo-sulfonic acid modified titanate nanotube hybrid nanostructures for the catalytic esterification of levulinic acid with n-butyl alcohol. 2019 , 361, 571-577		22
649	Facile use of lignite as robust organic ligands to construct Zr-based catalysts for the conversion of biomass derived carbonyl platforms into alcohols. 2019 , 239, 1304-1314		14
648	Preparation of High-Strength Sustainable Lignocellulose Gels and Their Applications for Antiultraviolet Weathering and Dye Removal. 2019 , 7, 2998-3009		41
647	Computational Framework for the Identification of Bioprivileged Molecules. 2019 , 7, 2414-2428		16

646	Mechanistic Investigation on Catalytic Deoxygenation of Phenol as a Model Compound of Biocrude Under Methane. 2019 , 7, 1512-1523	11
645	The Nature and Catalytic Function of Cation Sites in Zeolites: a Computational Perspective. 2019 , 11, 134-156	62
644	Effects of alkalinity of ionic liquids on the structure of biomass in pretreatment process. 2019 , 53, 177-189	5
643	The multi-scale challenges of biomass fast pyrolysis and bio-oil upgrading: Review of the state of art and future research directions. 2019 , 71, 1-80	184
642	Key Factors Affecting the Recalcitrance and Conversion Process of Biomass. 2019 , 12, 1-20	45
641	Electrical Double Layer as a Model of Interaction between Cellulose and Solid Acid Catalysts of Hydrolysis. 2019 , 20, 706-718	7
640	Surface characterization of Miscanthus giganteus and Willow subjected to torrefaction. 2019 , 138, 231-241	16
639	Fast pyrolysis of biomass: Advances in science and technology: A book review. 2019 , 213, 1411-1413	2
638	Synergistic Catalysis of Brønsted Acid and Lewis Acid Coexisted on Ordered Mesoporous Resin for One-Pot Conversion of Glucose to 5-Hydroxymethylfurfural. 2019 , 4, 1053-1059	6
637	Environment-friendly green composites based on soluble soybean polysaccharide: A review. 2019 , 122, 216-223	22
636	Carbon nano-sponge with enhanced electrochemical properties: A new understanding of carbon activation. 2019 , 358, 980-991	11
635	Condensation of pentose-derived furan compounds to C15 fuel precursors using supported phosphotungstic acid catalysts: Strategy for designing heterogeneous acid catalysts based on the acid strength and pore structures. 2019 , 570, 238-244	12
634	Towards Improved Biorefinery Technologies: 5-Methylfurfural as a Versatile C Platform for Biofuels Development. 2019 , 12, 185-189	27
633	One-pot cascade ethylene oligomerization using Ni/Siral-30 and H-ZSM-5 catalysts. 2019 , 572, 226-231	13
632	Fundamental catalytic challenges to design improved biomass conversion technologies. 2019 , 369, 518-525	35
631	Sequential catalytic-mixed-milling and thermohydrolysis of cassava starch improved ethanol fermentation. 2019 , 114, 72-84	8
630	Bioenergy for Sustainability and Security. 2019 ,	2
629	Thermal Conversions of Biomass. 2019 , 301-369	2

628	Ketonization kinetics of stearic acid. 2019 , 126, 601-610	5
627	Enhanced activity for electrochemical hydrogenation and hydrogenolysis of furfural to biofuel using electrodeposited Cu catalysts. 2019 , 323, 26-34	32
626	Effect of oxide supports on Pt-Ni bimetallic catalysts for the selective hydrogenation of biomass-derived 2(5H)-furanone. 2019 , 319, 93-99	6
625	Efficient one-pot hydrogenolysis of biomass-derived xylitol into ethylene glycol and 1,2-propylene glycol over CuNiZrO ₂ catalyst without solid bases. 2019 , 28, 101-106	16
624	A catalytic oxidative valorization of biomass-derived furfural with ethanol by copper/azodicarboxylate system. 2019 , 319, 100-104	14
623	Fabrication of spinel CoMn ₂ O ₄ hollow spheres for highly selective aerobic oxidation of 5-hydroxymethylfurfural to 2,5-diformylfuran. 2020 , 347, 39-47	23
622	A selective oxidative valorization of biomass-derived furfural and ethanol with the supported gold catalysts. 2020 , 355, 238-245	6
621	Tracking the paths for the sucrose transformations over bifunctional Ru-POM/AC catalysts. 2020 , 357, 113-121	3
620	Highly dispersed Pd catalysts supported on various carbons for furfural hydrogenation. 2020 , 350, 71-79	16
619	Techno-Economic and Environmental Analysis of Biogas Production from Plantain Pseudostem Waste in Colombia. 2020 , 11, 3161-3171	11
618	Mesostructured CMK-3 carbon supported NiZrO ₂ as catalysts for the hydrodeoxygenation of guaiacol. 2020 , 292, 109694	11
617	Magnetically separable catalyst for condensation of renewable aldehydes and 2-methylfuran to saturated cyclic oxygenates. 2020 , 197, 106191	5
616	Study on the hydrolysis of cellulose with the regenerable and recyclable multifunctional solid acid as a catalyst and its catalytic hydrolytic kinetics. 2020 , 27, 285-300	15
615	Comparative investigation of homogeneous and heterogeneous Brønsted base catalysts for the isomerization of glucose to fructose in aqueous media. 2020 , 261, 118126	28
614	Rice husk-derived carbon-silica supported Ni catalysts for selective hydrogenation of biomass-derived furfural and levulinic acid. 2020 , 261, 116339	21
613	Waste paper-derived magnetic carbon composite: A novel eco-friendly solid acid for the synthesis of n-butyl levulinate from furfuryl alcohol. 2020 , 146, 477-483	12
612	Highly Selective Hydrogenation of Furfural to Furan-2-ylmethanol over Zeolitic Imidazolate Frameworks-67-Templated Magnetic CuCo/C. 2020 , 150, 178-184	5
611	Selective production of ethylbenzene from lignin oil over FeOx modified Ru/Nb ₂ O ₅ catalyst. 2020 , 260, 118143	32

610	A comprehensive state-of-technology review for upgrading bio-oil to renewable or blended hydrocarbon fuels. 2020 , 118, 109548		82
609	Activity and stability of mesoporous CeO ₂ and ZrO ₂ catalysts for the self-condensation of cyclopentanone. 2020 , 267, 118373		13
608	Fatigue damage and lifetime prediction of fiber-reinforced ceramic-matrix composites. 2020 , 269-333		
607	Effects of temperature, hydrogen/carbon monoxide ratio and trace element addition on methane production performance from syngas biomethanation. 2020 , 295, 122296		12
606	Improving sweet sorghum for enhanced juice traits and biomass. 2020 , 139, 131-140		3
605	Solvent-free hydrogenation of levulinic acid to γ -valerolactone using a Shvo catalyst precursor: optimization, thermodynamic insights, and life cycle assessment. <i>Green Chemistry</i> , 2020 , 22, 2443-2458	10	13
604	Furan-2,5- and Furan-2,3-dicarboxylate Esters Derived from Marine Biomass as Plasticizers for Poly(vinyl chloride). 2020 , 5, 197-206		6
603	Characterization and Antioxidant Activity of Microwave-Extracted Phenolic Compounds from Biomass Residues. 2020 , 8, 1513-1519		14
602	Flame-made amorphous solid acids with tunable acidity for the aqueous conversion of glucose to levulinic acid. <i>Green Chemistry</i> , 2020 , 22, 688-698	10	10
601	Total hydrogenation of bio-derived furans over supported Ru subnanoclusters prepared via amino acid-assisted deposition. <i>Green Chemistry</i> , 2020 , 22, 850-859	10	4
600	Stability of monometallic Pt and Ru supported on hierarchical HZSM-5 nanosheets for hydrodeoxygenation of lignin-derived compounds in the aqueous phase. 2020 , 4, 1126-1134		11
599	Efficient UV-vis-IR photothermocatalytic selective ethanol oxidation on MnO _x /TiO ₂ nanocomposites significantly enhanced by a novel photoactivation. 2020 , 8, 1254-1264		8
598	In Situ Atmospheric Pressure Photoionization Mass Spectrometric Monitoring of Initial Pyrolysis Products of Biomass in Real Time. 2020 , 92, 603-606		11
597	Impact of the Spatial Organization of Bifunctional Metal-Zeolite Catalysts on the Hydroisomerization of Light Alkanes. 2020 , 132, 3620-3628		29
596	Impact of the Spatial Organization of Bifunctional Metal-Zeolite Catalysts on the Hydroisomerization of Light Alkanes. 2020 , 59, 3592-3600		41
595	Fuels and fuel additives from furfural derivatives via etherification and formation of methylfurans. 2020 , 200, 106308		25
594	Building hierarchical zeolite structure by post-synthesis treatment to promote the conversion of furanic molecules into biofuels. 2020 , 590, 117338		10
593	Catalytic Co-pyrolysis of Biomass and Plastics (Polypropylene and Polystyrene) Using Spent FCC Catalyst. 2020 , 34, 460-473		31

592	Light-Driven Depolymerization of Native Lignin Enabled by Proton-Coupled Electron Transfer. 2020 , 10, 800-805	39
591	Thermal Cracking of Sugars for the Production of Glycolaldehyde and Other Small Oxygenates. 2020 , 13, 688-692	11
590	Biodiesel production from phoenix tree seed oil catalyzed by liquid lipozyme TL100L. 2020 , 151, 152-160	16
589	Ru/MnCo ₂ O ₄ as a catalyst for tunable synthesis of 2,5-bis(hydroxymethyl)furan or 2,5-bis(hydroxymethyl)tetrahydrofuran from hydrogenation of 5-hydroxymethylfurfural. 2020 , 484, 110722	12
588	Mechanistic insights into furfuryl alcohol based biofuel production over phosphotungstate catalysts. 2020 , 129, 29-40	2
587	Silver nitrate in situ upgrades pyrolysis biofuels from brewer's spent grain via biotemplating. 2020 , 146, 104729	4
586	HMF and furfural: Promising platform molecules in rhodium-catalyzed carbonylation reactions for the synthesis of furfuryl esters and tertiary amides. 2020 , 381, 215-221	15
585	The challenge of converting biomass polysaccharides into levulinic acid through heterogeneous catalytic processes. 2020 , 14, 417-445	9
584	The Effect of Ni-ZSM-5 Catalysts on Catalytic Pyrolysis and Hydro-Pyrolysis of Biomass. 2020 , 8, 790	8
583	Hydrocarbon hydrogen carriers for catalytic transfer hydrogenation of guaiacol. 2020 , 45, 27381-27391	2
582	A systematic study of the synthesis of transition metal phosphides and their activity for hydrodeoxygenation of phenol. 2020 , 381, 133-133	3
581	Economical process for the co-production of renewable polymers and value-added chemicals from lignocellulosic biomass. 2020 , 276, 124237	11
580	Non-noble metal catalysts for transfer hydrogenation of levulinic acid: The role of surface morphology and acid-base pairs. 2020 , 18, 100501	4
579	Reductive catalytic fractionation of pine wood: elucidating and quantifying the molecular structures in the lignin oil. 2020 , 11, 11498-11508	35
578	A comprehensive review on countermeasures for CO ₂ emissions from ships. 2020 , 134, 110222	40
577	Microwave-Assisted Lignin Conversion to Liquid Products in the Presence of Iron and Nickel. 2020 , 60, 1019-1025	8
576	Selective conversion of biomass-derived furfuryl alcohol into n-butyl levulinate over sulfonic acid functionalized TiO ₂ nanotubes. 2020 ,	11
575	Electrocatalytic hydrogenation and depolymerization pathways for lignin valorization: toward mild synthesis of chemicals and fuels from biomass. <i>Green Chemistry</i> , 2020 , 22, 7233-7264	10 22

574	Organocatalytic Approach to Photochemical Lignin Fragmentation. 2020 , 22, 8082-8085		14
573	Electrohydrodimerization of biomass-derived furfural generates a jet fuel precursor. <i>Green Chemistry</i> , 2020 , 22, 5395-5401	10	11
572	Toward an Intensified Process of Biomass-Derived Monomers: The Influence of 5-(Hydroxymethyl)furfural Byproducts on the Gold-Catalyzed Synthesis of 2,5-Furandicarboxylic Acid. 2020 , 8, 11512-11521		11
571	A Robust and Highly Selective Catalytic System of Copper-Silica Nanocomposite and 1-Butanol in Fructose Hydrogenation to Mannitol. 2020 , 13, 5050-5057		0
570	Operating conditions to maximize clean liquid fuels yield by oligomerization of 1-butene on HZSM-5 zeolite catalysts. 2020 , 207, 118317		3
569	Mechanistic Insights into the Solvent-Driven Adsorptive Hydrodeoxygenation of Biomass Derived Levulinate Acid/Ester to 2-Methyltetrahydrofuran over Bimetallic Cu/Ni Catalysts. 2020 , 8, 11477-11490		13
568	Classification, characterization, and properties of edible and non-edible biomass feedstocks. 2020 , 89-120		3
567	Challenges and future prospects in heterogeneous catalysis for biorefinery technologies. 2020 , 225-250		2
566	Direct conversion of gas-glycerol to Allyl alcohol over V, Ti or Nb modified MoFe/KIT-6 oxide catalysts. 2020 , 498, 111279		3
565	Nanoporous catalysts for biomass conversion. 2020 , 387-440		1
564	Supported Bimetallic Catalysts for the Solvent-Free Hydrogenation of Levulinic Acid to γ -Valerolactone: Effect of Metal Combination (Ni-Cu, Ni-Co, Cu-Co). 2020 , 10, 1354		3
563	Anise Essential Oil as a Sustainable Substrate in the Multicomponent Double Povarov Reaction for Julolidine Synthesis. 2020 , 85, 15622-15630		2
562	Effect of Oxide Supports on the Activity of Pd Based Catalysts for Furfural Hydrogenation. 2020 , 10, 837		6
561	Modelling, simulation and optimization of a solid residues downdraft gasifier: Application to the co-gasification of municipal solid waste and sugarcane bagasse. 2020 , 210, 118498		9
560	Impact of Acidic/Basic Sites of the Catalyst on Properties of the Coke Formed in Pyrolysis of Guaiacol: A Model Compound of the Phenolics in Bio-oil. 2020 , 34, 11026-11040		4
559	Process design and techno-economic evaluation for the production of platform chemical for hydrocarbon fuels from lignocellulosic biomass using biomass-derived γ -Valerolactone. 2020 , 161, 750-755		10
558	Strategic use of CO ₂ in the catalytic thermolysis of bio-heavy oil over Co/SiO ₂ for the enhanced production of syngas. 2020 , 222, 113195		9
557	Biodiesel production from refined used cooking oil using co-metal oxide catalyzed transesterification. 2020 , 153, 1-11		22

556	Isolation and characterization of thermophilic cellulose and hemicellulose degrading bacterium, <i>Thermoanaerobacterium</i> sp. R63 from tropical dry deciduous forest soil. 2020 , 15, e0236518	5
555	Aldol condensation of furfural with acetone over Ca/ZSM-5 catalyst with lower dosages of water and acetone. 2020 , 108, 16-22	6
554	Pretreatment of plant feedstocks and agrofood waste using ionic liquids. 2020 , 393-413	
553	An Efficient Heterogeneous Acid Catalyst DICAT-1 for One-Pot Conversion of Sucrose into 5-(Hydroxymethyl)furfural. 2020 , 34, 9643-9653	4
552	Sustainable Production of Bioplastics from Lignocellulosic Biomass: Technoeconomic Analysis and Life-Cycle Assessment. 2020 , 8, 12419-12429	27
551	Simulation of sorption enhanced staged gasification of biomass for hydrogen production in the presence of calcium oxide. 2020 , 45, 26855-26864	19
550	Downstream Processing Strategies for Lignin-First Biorefinery. 2020 , 13, 5199-5212	25
549	Efficient Route for the Production of Isoprene via Decarboxylation of Bioderived Mevalonolactone. 2020 , 10, 9649-9661	8
548	Catalytic Activity of Mixed Al ₂ O ₃ -ZrO ₂ Oxides for Glucose Conversion into 5-Hydroxymethylfurfural. 2020 , 10, 878	5
547	Synthesis of Functional Chemicals from Lignin-derived Monomers by Selective Organic Transformations. 2020 , 362, 5143-5169	17
546	Sustainable energy and fuels from biomass: a review focusing on hydrothermal biomass processing. 2020 , 4, 4390-4414	47
545	Prediction of Bio-oil Yield and Hydrogen Contents Based on Machine Learning Method: Effect of Biomass Compositions and Pyrolysis Conditions. 2020 , 34, 11050-11060	36
544	Studies of the Fragmentation Mechanisms of Deprotonated Lignin Model Compounds in Tandem Mass Spectrometry. 2020 , 92, 11895-11903	4
543	Investigation of the reaction mechanism of the hydrodeoxygenation of propionic acid over a Rh(1 1) surface: A first principles study. 2020 , 391, 98-110	2
542	Structural evolution of ZIF-67-derived catalysts for furfural hydrogenation. 2020 , 392, 302-312	9
541	Mechanistic Insights into the Conversion of Biorenewable Levoglucosan to Dideoxysugars. 2020 , 8, 16339-16349	1
540	Insight into KOH activation mechanism during biomass pyrolysis: Chemical reactions between O-containing groups and KOH. 2020 , 278, 115730	54
539	Catalytic conversions of isocyanate to urea and glucose to levulinate esters over mesoporous H ₂ Ti(HPO ₄) ₂ H ₂ O in green media. 2020 , 44, 16452-16460	5

538	5-Hydroxymethylfurfural Hydrodeoxygenation to 2,5-Dimethylfuran in Continuous-Flow System over Ni on Nitrogen-Doped Carbon. 2020 , 1, 106-115	10
537	Biomass Catalytic Pyrolysis over Zeolite Catalysts with an Emphasis on Porosity and Acidity: A State-of-the-Art Review. 2020 , 34, 11771-11790	18
536	Reductive catalytic fractionation of lignocellulose: when should the catalyst meet depolymerized lignin fragments?. 2020 , 4, 5588-5594	6
535	Characterization of Slow Pyrolysis Products of <i>Macaranga motleyana</i> : Effect of Sample Size. 2020 , 833, 012045	
534	Ni-Pd/ γ -Al ₂ O ₃ Catalysts in the Hydrogenation of Levulinic Acid and Hydroxymethylfurfural towards Value Added Chemicals. 2020 , 10, 1026	4
533	Acetic acid and propionic acid decarboxylation on Mg(OH) ₂ nanoclusters: a density functional theory study. 2020 , 55, 16914-16927	
532	Coking Prediction in Catalytic Glucose Conversion to Levulinic Acid Using Improved Lattice Boltzmann Model. 2020 , 59, 17462-17475	0
531	Progress in Modeling of Biomass Fast Pyrolysis: A Review. 2020 , 34, 15195-15216	16
530	Are fermentation products promising feedstock for high-density bio-fuel? domino reactions for upgrading aqueous acetone/Butanol/Ethanol mixtures. <i>Green Chemistry</i> , 2020 , 22, 6137-6147	10 5
529	γ -Valerolactone-based organic electrolyte solutions: a benign approach to polyaramid dissolution and processing. <i>Green Chemistry</i> , 2020 , 22, 6127-6136	10 6
528	Bio-Based Cycloalkanes: The Missing Link to High-Performance Sustainable Jet Fuels. 2020 , 13, 5777-5807	24
527	Assessing the Potential of Amorphous Silica Surfaces for the Removal of Phenol from Biofuel: A Density Functional Theory Investigation. 2020 , 124, 20262-20269	8
526	One Pot Hydrogenation of Furfural to 2-Methyl Tetrahydrofuran over Supported Mono- and Bi-metallic Catalysts. 2020 , 5, 9590-9600	4
525	Influences of Magnesium Content in Rehydrated Mixed Oxides on Furfural Conversion. 2020 , 10, 1484	
524	Computational and Experimental Mechanistic Insights into the Ethanol-to-Butanol Upgrading Reaction over MgO. 2020 , 10, 15162-15177	7
523	TiO ₂ /ZrO ₂ Composite Oxide as an Acid/Base Bifunctional Catalyst for Self-Condensation of Cyclopentanone. 2020 , 59, 19918-19928	6
522	Iron(0)-Catalyzed Hydrothermal Liquefaction of Switchgrass: the Effects of Co-Catalysts and Reductive Conditions. 2020 , 13, 1171-1179	3
521	N,N,O-Coordinated tricarbonylrhenium precatalysts for the aerobic deoxydehydration of diols and polyols. 2020 , 10, 3782-3788	4

520	Catalytic Production of Oxygenated and Hydrocarbon Chemicals From Cellulose Hydrogenolysis in Aqueous Phase. 2020 , 8, 333	9
519	Reaction Kinetics Analysis of Ethanol Dehydrogenation Catalyzed by MgO/BiO ₂ . 2020 , 10, 6318-6331	15
518	Furfuryl alcohol: promising platform chemical. 2020 , 323-353	3
517	One-step process to produce furfural from sugarcane bagasse over niobium-based solid acid catalysts in a water medium. 2020 , 207, 106482	19
516	Reduction of sugar derivatives to valuable chemicals: utilization of asymmetric carbons. 2020 , 10, 3805-3824	9
515	Synthesis of glycidyl methacrylate modified hyper-cross-linked resins and enhancing their adsorptions toward levulinic acid and furfural from sugarcane bagasse hydrolysate. 2020 , 95, 2537-2548	0
514	Biotechnology for Biofuels: A Sustainable Green Energy Solution. 2020 ,	3
513	Critical temperatures and pressures, heat capacities, and thermal diffusivities of γ -valerolactone and some alkyl pentanoates. 2020 , 149, 106162	3
512	Biological renewable hemicellulose-template for synthesis of visible light responsive sulfur-doped TiO ₂ for photocatalytic oxidation of toxic organic and As(III) pollutants. 2020 , 525, 146531	21
511	Sustainable Conversion of Biomass-derived Carbohydrates into Lactic Acid Using Heterogeneous Catalysts. 2020 , 7, 282-289	2
510	Characteristics of the catalytic fast pyrolysis of vegetable oil soapstock for hydrocarbon-rich fuel. 2020 , 213, 112860	22
509	Adsorptive Separation of Furfural/5-Hydroxymethylfurfural in MAF-5 with Ellipsoidal Pores. 2020 , 59, 11734-11742	9
508	Pd(II) and Pt(II) catalysed selective synthesis of furfuryl alcohol: Solvent effects and insights into the mechanism. 2020 , 922, 121362	7
507	Understanding reaction kinetics, deprotonation and solvation of brønsted acidic protons in heteropolyacid catalyzed synthesis of biorenewable alkyl levulinates. 2020 , 400, 125916	22
506	A perspective on biomass-derived biofuels: From catalyst design principles to fuel properties. 2020 , 400, 123198	14
505	Semi-continuous mechanochemical process for biodiesel production under heterogeneous catalysis using calcium diglyceroxide. 2020 , 159, 117-126	7
504	Continuous production of furfural from pulp prehydrolysate in a vaporization reactor. 2020 , 153, 112565	5
503	Influence of the pendant arm in deoxydehydration catalyzed by dioxomolybdenum complexes supported by amine bisphenolate ligands. 2020 , 44, 9933-9941	5

502	Hydrogenation of Lignin-Derived Phenolic Compound Eugenol over Ruthenium-Containing Nickel Hydrotalcite-Type Materials. 2020 , 59, 11979-11990	29
501	Evaluation of pressure and temperature effects on hydropyrolysis of pine sawdust: pyrolysate composition and kinetics studies. 2020 , 5, 1484-1500	11
500	Facile Construction of Synergistic α -Glucosidase and Cellulase Sequential Co-immobilization System for Enhanced Biomass Conversion. 2020 , 38, 1277-1285	1
499	Selective production of glycolaldehyde via hydrothermal pyrolysis of glucose: Experiments and microkinetic modeling. 2020 , 149, 104846	6
498	A review of conversion of lignocellulose biomass to liquid transport fuels by integrated refining strategies. 2020 , 208, 106485	49
497	Upgrading 1-butanol to unsaturated, carbonyl and aromatic compounds: a new synthesis approach to produce important organic building blocks. <i>Green Chemistry</i> , 2020 , 22, 2365-2369	10 4
496	An Efficient Acetalization Method for Biomass-Derived Furfural with Ethanol Using FeAl_2O_3 -Supported Catalysts. 2020 , 5, 3458-3470	3
495	Aqueous-Phase Reforming of Glycerol over Carbon-Nanotube-Supported Catalysts. 2020 , 150, 2674-2687	2
494	Direct production of biodiesel from waste oils with a strong solid base from alkalized industrial clay ash. 2020 , 264, 114735	20
493	A novel hafnium-graphite oxide catalyst for the Meerwein-Ponndorf-Verley reaction and the activation effect of the solvent.. 2020 , 10, 9985-9995	7
492	Ruthenium-containing SBA-12 catalysts for anisole hydrodeoxygenation. 2020 , 354, 67-76	8
491	Effect of removing hemicellulose and lignin synchronously under mild conditions on enzymatic hydrolysis of corn stover. 2020 , 204, 106407	13
490	The Development of Mesoporous Ni-Based Catalysts and Evaluation of Their Catalytic and Photocatalytic Applications. 2020 , 5, 3710-3723	2
489	Biofuel Production Technologies: Critical Analysis for Sustainability. 2020 ,	3
488	5-HMF production from glucose using ion exchange resin and alumina as a dual catalyst in a biphasic system.. 2020 , 10, 9492-9498	10
487	Functionalized Metal-Organic Framework Catalysts for Sustainable Biomass Valorization. 2020 , 2020, 1-11	8
486	Reaction Mechanism of Vapor-Phase Formic Acid Decomposition over Platinum Catalysts: DFT, Reaction Kinetics Experiments, and Microkinetic Modeling. 2020 , 10, 4112-4126	36
485	Bi-Functional Magnesium Silicate Catalyzed Glucose and Furfural Transformations to Renewable Chemicals. 2020 , 12, 4807-4816	3

484	Applications of xylochemistry from laboratory to industrial scale. <i>Green Chemistry</i> , 2020 , 22, 4411-4425	10	1
483	Stable Continuous Production of γ -Valerolactone from Biomass-Derived Levulinic Acid over Zr-Al-Beta Zeolite Catalyst. 2020 , 10, 678		12
482	1. Furfural derivatives from agricultural and agri-food wastes by heterogeneous catalysis. 2020 , 1-30		
481	Weak-base pretreatment to increase biomethane production from wheat straw. 2020 , 27, 37989-38003		6
480	Recovery of pentoses-containing olive stones for their conversion into furfural in the presence of solid acid catalysts. 2020 , 143, 1-13		2
479	Study on the mechanism of furfural to maleic acid oxidized by hydrogen peroxide in formic acid solution. 2020 , 19, 2050019		0
478	Microwave-Assisted Oxidation of Hydroxymethyl Furfural to Added-Value Compounds over a Ruthenium-Based Catalyst. 2020 , 8, 3091-3102		26
477	Influence of the ammonium salts used in the Brønsted acid catalyzed hydrothermal decomposition of D-glucose towards 5-HMF. 2020 , 44, 4171-4176		1
476	Forestry biorefineries. 2020 , 154, 461-475		31
475	Catalytic Properties of Microporous Zeolite Catalysts in Synthesis of Isosorbide from Sorbitol by Dehydration. 2020 , 10, 148		8
474	Aryl Butyl Acetals as Oxygenate Octane-Enhancing Additives for Motor Fuels. 2020 , 60, 134-139		1
473	Unveiling one-pot scalable fabrication of reusable carboxylated heterogeneous carbon-based catalysts from eucalyptus plant with the assistance of dry ice for selective hydrolysis of eucalyptus biomass. 2020 , 153, 998-1004		14
472	Review on neoteric biorefinery systems from detritus lignocellulosic biomass: A profitable approach. 2020 , 256, 120607		15
471	Advances in biological conversion technologies: new opportunities for reaction engineering. 2020 , 5, 632-640		13
470	Strategies to Control Electrochemical Hydrogenation and Hydrogenolysis of Furfural and Minimize Undesired Side Reactions. 2020 , 10, 3212-3221		37
469	Alkaline wet oxidation of lignin over Cu-Mn mixed oxide catalysts for production of vanillin. 2020 , 352, 95-103		19
468	Basic understanding of the color distinction of lignin and the proper selection of lignin in color-depended utilizations. 2020 , 147, 607-615		22
467	Valorization of Vegetable Waste via Pyrolysis: Thermal Behavior, Volatiles Release, and Products Analysis from Its Extractives. 2020 , 34, 1896-1907		5

466	High-Throughput Heterogeneous Catalyst Research, Development, Scale-Up, and Production Support. 2020 , 611-661	1
465	Direct Catalytic Conversion of Furfural to Furan-derived Amines in the Presence of Ru-based Catalyst. 2020 , 13, 1699-1704	11
464	Levulinic acid: A potential keto acid for producing biofuels and chemicals. 2020 , 171-197	2
463	Understanding the structural changes of lignin in poplar following steam explosion pretreatment. 2020 , 74, 275-285	11
462	Nickel on nitrogen-doped carbon pellets for continuous-flow hydrogenation of biomass-derived compounds in water. <i>Green Chemistry</i> , 2020 , 22, 2755-2766	10 25
461	The effect of metal precursor on copper phase dispersion and nanoparticle formation for the catalytic transformations of furfural. 2020 , 273, 119062	27
460	Oligomeric ricinoleic acid preparation promoted by an efficient and recoverable Brønsted acidic ionic liquid. 2020 , 16, 351-361	2
459	The role of pretreatment in the catalytic valorization of cellulose. 2020 , 487, 110883	30
458	One-dimensional mesoporous inorganic nanostructures and their applications in energy, sensor, catalysis and adsorption. 2020 , 113, 100671	39
457	Solid catalysts for conversion of furfural and its derivatives to alkanediols. 2020 , 62, 566-606	4
456	A Study of the Mechanisms of Guaiacol Pyrolysis Based on Free Radicals Detection Technology. 2020 , 10, 295	7
455	Techno-Economic Analysis for Production of D-Arabitol from L-Arabinose. 2020 , 43, 1260-1267	2
454	Platinum and Palladium Monolayer Electrocatalysts for Formic Acid Oxidation. 2020 , 63, 742-749	9
453	Deactivation and regeneration of carbon supported Pt and Ru catalysts in aqueous phase hydrogenation of 2-pentanone. 2020 , 10, 3047-3056	4
452	Molybdenum-catalyzed oxidative depolymerization of alkali lignin: Selective production of Vanillin. 2020 , 598, 117567	19
451	Hollow Hierarchical Silicalite-1 Zeolite Encapsulated PtNi Bimetals for Selective Hydroconversion of Methyl Stearate into Aviation Fuel Range Alkanes. 2020 , 59, 8601-8611	7
450	Catalytic transfer hydrogenation of biomass-derived levulinic acid to γ -valerolactone over Sn/Al-SBA-15 catalysts. 2020 , 44, 8209-8222	8
449	Microwave-assisted catalytic conversion of glucose to 5-hydroxymethylfurfural using "three dimensional" graphene oxide hybrid catalysts. 2020 , 10, 11727-11736	12

448	Hydroxyalkylation/alkylation of 2-methylfuran and furfural over niobic acid catalysts for the synthesis of high carbon transport fuel precursors. 2020 , 4, 3018-3028	9
447	Biotransformations with crude enzymes and whole cells. 2020 , 335-361	
446	Nitrogen-doped carbon: A metal-free catalyst for selective oxidation of crude 5-hydroxymethylfurfural obtained from high fructose corn syrup (HFCS-90) to 2,5-furandicarboxylic acid (FDCA). 2021 , 404, 127063	12
445	A review on solvent systems for furfural production from lignocellulosic biomass. 2021 , 137, 110172	52
444	Dearomatization-Rearomatization Strategy for ortho-Selective Alkylation of Phenols with Primary Alcohols. 2021 , 60, 4043-4048	13
443	Elucidation of surface active sites by formic acid adsorbed IR studies in the hydrogenation of levulinic acid to valeric acid over rare earth metal doped titania supported nickel catalysts. 2021 , 375, 112-119	1
442	Condensation of furans for the production of diesel precursors: A study on the effects of surface acid sites of sulfonated carbon catalysts. 2021 , 375, 155-163	3
441	Biomass, biorefinery, and biofuels. 2021 , 51-87	2
440	Recent advances and challenges of inter-disciplinary biomass valorization by integrating hydrothermal and biological techniques. 2021 , 135, 110370	52
439	The role of ZnO in the catalytic behaviour of Zn-Al mixed oxides in aldol condensation of furfural with acetone. 2021 , 379, 181-191	6
438	Fabrication of porous polymer membrane from polysulfone grafted with acid ionic liquid and the catalytic property for inulin hydrolysis. 2021 , 618, 118742	5
437	Catalyst Development in the Dehydrogenative Borylation of Alkenes for the Synthesis Vinylboronate Esters. 2021 , 32, 102-108	2
436	Thermochemical processing of woody biomass: A review focused on energy-driven applications and catalytic upgrading. 2021 , 136, 110376	25
435	Experimental investigation of the adsorption and desorption of cellulase enzymes on zeolite- Γ for enzyme recycling applications. 2021 , 44, 495-505	1
434	Exploring the interaction of amino acid-based ionic liquids in water and organic solvents: Insight from MD simulations and QM calculations. 2021 , 327, 114867	
433	Catalytic upgrading of Quercus Mongolica under methane environment to obtain high yield of bioaromatics. 2021 , 272, 116016	4
432	Enhanced solar-driven benzaldehyde oxidation with simultaneous hydrogen production on Pt single-atom catalyst. 2021 , 284, 119759	12
431	New (and Old) Monomers from Biorefineries to Make Polymer Chemistry More Sustainable. 2021 , 42, e2000485	13

430	Zirconium and hafnium polyhedral oligosilsesquioxane complexes as green homogeneous catalysts in the formation of bio-derived ethers via a MPV/etherification reaction cascade. 2021 , 11, 211-218		4
429	Molecular H ₂ O promoted catalytic bicarbonate reduction with methanol into formate over Pd _{0.5} Cu _{0.5} /C under mild hydrothermal conditions. <i>Green Chemistry</i> , 2021 , 23, 430-439	10	9
428	Fixation of CO into Cyclic Carbonates by Halogen-Bonding Catalysis. 2021 , 14, 738-744		10
427	H ₂ -Free Selective Dehydroxymethylation of Primary Alcohols over Palladium Nanoparticle Catalysts. 2021 , 13, 1135-1139		0
426	Immobilization of Laccase on Magnetic Nanoparticles and Application in the Detoxification of Rice Straw Hydrolysate for the Lipid Production of <i>Rhodotorula glutinis</i> . 2021 , 193, 998-1010		2
425	Simultaneous esterification and transesterification of waste phoenix seed oil with a high free fatty acid content using a free lipase catalyst to prepare biodiesel. 2021 , 144, 105930		13
424	Influence of delignification and reaction conditions in the aqueous phase transformation of lignocellulosic biomass to platform molecules. 2021 , 321, 124500		3
423	Effect of surface chemistry on the uptake of lignin-derived aromatic molecules on ordered mesoporous silica. 2021 , 313, 110809		
422	Direct Synthesis of Multi(boronate) Esters from Alkenes and Alkynes via Hydroboration and Boration Reactions. 2021 , 11, 1-18		26
421	Facile gas-phase hydrodeoxygenation of 2,5-dimethylfuran over bifunctional metal-acid catalyst Pt-CsHPWO. 2021 , 57, 227-230		5
420	Elucidation of Active Sites in Aldol Condensation of Acetone over Single-Facet Dominant Anatase TiO ₂ (101) and (001) Catalysts. 2021 , 1, 41-52		13
419	Improving revenue from lignocellulosic biofuels: An integrated strategy for coproducing liquid transportation fuels and high value-added chemicals. 2021 , 287, 119369		10
418	Synthesis of renewable aviation fuel additives with aromatic aldehydes and methyl isobutyl ketone under solvent-free conditions. 2021 , 5, 556-563		1
417	Fast microflow kinetics and acid catalyst deactivation in glucose conversion to 5-hydroxymethylfurfural. 2021 , 6, 152-164		9
416	Surface kinetics and transport phenomena modelling for furfural hydrotreatment over Pd/C in isopropanol and tetrahydrofuran. 2021 , 541, 148485		4
415	Dearomatization-Rearomatization Strategy for ortho-Selective Alkylation of Phenols with Primary Alcohols. 2021 , 133, 4089-4094		0
414	The effects of fuel variability on the electrical performance and durability of a solid oxide fuel cell operating on biohythane. 2021 , 46, 2630-2645		1
413	First-principles theoretical study on dry reforming of methane over perfect and boron-vacancy-containing h-BN sheet-supported Ni catalysts. 2021 , 23, 617-627		7

412	Improve Production of Pullulanase of <i>Bacillus subtilis</i> in Batch and Fed-Batch Cultures. 2021 , 193, 296-306	2
411	Selective Synthesis of Cyclohexanol Intermediates from Lignin-Based Phenolics and Diaryl Ethers using Hydrogen over Supported Metal Catalysts: A Critical Review. 2021 , 25, 1-26	4
410	Aqueous phase reforming of lignin-rich hydrothermal liquefaction by-products: A study on catalyst deactivation. 2021 , 365, 206-213	8
409	Cu ₂ O(100) surface as an active site for catalytic furfural hydrogenation. 2021 , 282, 119576	15
408	Thermochemical Conversion of Biomass and Upgrading of Bio-Products to Produce Fuels and Chemicals. 2021 , 1-47	
407	Understanding Biomass Chemistry Using Multiscale Molecular Modeling Approach. 2021 , 273-290	
406	Furfural and Chemical Routes for Its Transformation into Various Products. 2021 , 705-719	
405	Modified Metal-Organic Frameworks as Efficient Catalysts for Lignocellulosic Biomass Conversion. 2021 , 42, 346-358	3
404	Compositional analysis of organosolv poplar lignin by using high-performance liquid chromatography/high-resolution multi-stage tandem mass spectrometry. <i>Green Chemistry</i> , 2021 , 23, 983-1000	10 3
403	One-pot self-assembly synthesis of Ni-doped ordered mesoporous carbon for quantitative hydrogenation of furfural to furfuryl alcohol. <i>Green Chemistry</i> , 2021 , 23, 1861-1870	10 9
402	Selective hydrogenation of levulinic acid to γ -valerolactone using bimetallic Pd-Fe catalyst supported on titanium oxide. 980, 012013	3
401	Electrochemical oxidation of 5-hydroxymethylfurfural on ternary metal-organic framework nanoarrays: enhancement from electronic structure modulation. 2021 , 9, 14270-14275	10
400	Levulinic Acid- and Furan-Based Multifunctional Materials: Opportunities and Challenges. 2021 , 291-343	
399	Competitive adsorption of phenol and toluene onto silica-supported transition metal clusters for biofuel purification.	3
398	Xylochemicals and where to find them. 2021 , 57, 9979-9994	0
397	Improving the hydrothermal stability of zeolite Y by La cation exchange as a catalyst for the aqueous-phase hydrogenation of levulinic acid.. 2021 , 11, 5568-5579	3
396	Catalytic hydrodeoxygenation for upgrading of lignin-derived bio-oils. 2021 , 129-145	1
395	Air-Stable and Reusable Cobalt Phosphide Nanoalloy Catalyst for Selective Hydrogenation of Furfural Derivatives. 2021 , 11, 750-757	20

394	Ru Nanoparticles on a Sulfonated Carbon Layer Coated SBA-15 for Catalytic Hydrogenation of Furfural into 1, 4-pentanediol. 2021 , 151, 2513-2526		3
393	Biomass Waste as Sustainable Raw Material for Energy and Fuels. 2021 , 13, 794		49
392	Recent advances in sustainable synthesis of N-heterocycles following acceptorless dehydrogenative coupling protocol using alcohols. 2021 , 8, 2673-2709		22
391	Efficient hydrogenation of levulinic acid catalysed by spherical NHC-Ir assemblies with atmospheric pressure of hydrogen. <i>Green Chemistry</i> , 2021 , 23, 5037-5042	10	3
390	Catalytic Conversion of Alcohols into Value-Added Products. 2021 , 505-590		
389	Green and Sustainable Biomass Processing for Fuels and Chemicals. 2021 , 23-44		
388	Carbohydrates to Chemicals and Fuel Additives over Modified Polyoxometalate Catalysts. 2021 , 429-458		0
387	Preparation of cyclohexanol intermediates from lignin through catalytic intervention. 2021 , 57-82		
386	Nanocatalysts for Biofuels Production. 2021 , 1613-1638		
385	Polymeric waste valorization at a crossroads: ten ways to bridge the research on model and complex/real feedstock. <i>Green Chemistry</i> , 2021 , 23, 4656-4664	10	1
384	Synthesis of amides and esters containing furan rings under microwave-assisted conditions. 2021 , 19, 265-280		0
383	Effect of temperature on catalytic pyrolysis of Polyalthia Longifolia leaves solid waste and characterization of their products. 2021 , 4, 100062		3
382	Conversion of Lignocellulosic Biomass to Biofuels. 2021 , 593-616		
381	A Career in Catalysis: James A. Dumesic. 2021 , 11, 2310-2339		1
380	Fe ₃ O ₄ @SiO ₂ @CuZnAl-O Catalysts for Conversion of Lignin in Supercritical Methanol ?. 2021 , 21, 89-98		1
379	Cooperative Activation of Cellulose with Natural Calcium. 2021 , 1, 272-281		3
378	RECENT APPLICATIONS AND INNOVATIONS OF CELLULOSE BASED MATERIALS: A CRITICAL REVIEW. 2021 , 55, 1-12		2
377	Sustainable Isomerization of Pinene Oxide to trans-Carveol using Formic Acid/Aniline System at Room Temperature. 2021 , 5, 2000212		2

- 376 Embracing the Energy and Environmental Challenges of the Twenty-First Century Through Heterogeneous Catalysis. **2021**, 525-531
- 375 Evaluating fractional pyrolysis for bio-oil speciation into holocellulose and lignin derived compounds. **2021**, 154, 105019 3
- 374 Metal Sub-nanoclusters Confined within Hierarchical Porous Carbons with High Oxidation Activity. **2021**, 60, 10842-10849 9
- 373 Mechanochemical Functionalization of Mesoporous Carbons for the Catalytic Transformation of trans-Ferulic Acid into Vanillin. **2021**, 9, 4704-4710 3
- 372 Metal Catalyst and Hydrogen Gas-Free Selective Reduction of Biomass-Derived Substituted Furfuraldehyde to Alkyl Furan as a Key Biofuel Additive. **2021**, 25, 892-899 3
- 371 Guerbet Reactions for Biofuel Production from ABE Fermentation Using Bifunctional Ni-MgO-Al₂O₃ Catalysts. **2021**, 11, 414 4
- 370 Metal Sub-nanoclusters Confined within Hierarchical Porous Carbons with High Oxidation Activity. **2021**, 133, 10937-10944
- 369 Photocatalytic and Photoelectrochemical Reforming of Biomass. **2021**, 389-417 2
- 368 Efficient Conversion of the Lignocellulosic Biomass Waste into 5-Hydroxymethylfurfural-Enriched Bio-Oil and Co Nanoparticle-Functionalized Biochar. **2021**, 1, 895-904 1
- 367 Chemoselective Deoxygenation of 2° Benzylic Alcohols through a Sequence of Formylation and B(C₆F₅)₃-Catalyzed Reduction. **2021**, 2021, 2103-2106 1
- 366 Catalytic fast pyrolysis of lignocellulosic biomass: Critical role of zeolite catalysts. **2021**, 139, 110707 45
- 365 Electrodeposited Ni-Rich Ni-Pt Mesoporous Nanowires for Selective and Efficient Formic Acid-Assisted Hydrogenation of Levulinic Acid to γ -Valerolactone. **2021**, 37, 4666-4677 4
- 364 Hydrothermal Stable Pd/ γ -Al₂O₃ @PA for Selective Conversion of Glutamic Acid to Bio-Based 2-Pyrrolidone. **2021**, 6, 4124-4128 3
- 363 Influences of the metal-acid proximity of Pd-SAPO-31 bifunctional catalysts for n-hexadecane hydroisomerization. **2021**, 214, 106717 4
- 362 Hydrogen-free hydrogenation of furfural to furfuryl alcohol and 2-methylfuran over Ni and Co-promoted Cu/ γ -Al₂O₃ catalysts. **2021**, 214, 106721 11
- 361 Ru Catalysts Supported on Commercial and Biomass-Derived Activated Carbons for the Transformation of Levulinic Acid into γ -Valerolactone under Mild Conditions. **2021**, 11, 559 2
- 360 Nanocellulose Supported PdNPs as in situ Formed Nano Catalyst for the Suzuki Coupling Reaction in Aqueous Media: A Green Approach and Waste to Wealth. **2021**, 937, 121719 9
- 359 Sustainable nitrogen-containing chemicals and materials from natural marine resources chitin and microalgae. **2021**, 505, 111517 4

358	Insights into Hydrodeoxygenation of Furfural and Guaiacol Mixture: Experimental and Theoretical Studies. 2021 , 125, 7647-7657	0
357	Biomass for a sustainable bioeconomy: An overview of world biomass production and utilization. 2021 , 139, 110691	79
356	Catalytic pyrolysis of pine bark over Ni/SiO ₂ in a CO ₂ atmosphere. 2021 , 220, 119827	8
355	Recent advances in the preparation of levulinic esters from biomass-derived furanic and levulinic chemical platforms using heteropoly acid (HPA) catalysts. 2021 , 505, 111484	14
354	Application of 2-methylfuran and 5-methylfurfural for the synthesis of C16 fuel precursor over fibrous silica-supported heteropoly acid-functionalized ionic liquid. 2021 , 38, 1170-1178	2
353	Rational design of bifunctional hierarchical Pd/SAPO-5 for the synthesis of tetrahydrofuran derivatives from furfural. 2021 , 397, 75-89	2
352	Thermal Catalytic Conversion of Biomass-Derived Glucose to Fine Chemicals. 2021 , 35, 8602-8616	5
351	Alternative fuel options for low carbon maritime transportation: Pathways to 2050. 2021 , 297, 126651	41
350	Steam reforming of sugars: Roles of hydroxyl group and carbonyl group in coke formation. 2021 , 292, 120282	7
349	Advances in catalytic production of value-added biochemicals and biofuels via furfural platform derived lignocellulosic biomass. 2021 , 148, 106033	27
348	Elucidating the Mechanism of Ambient-Temperature Aldol Condensation of Acetaldehyde on Ceria. 2021 , 11, 8621-8634	2
347	Experimental Investigation of the Mechanical and Thermal Behavior of a PT6A-61A Engine Using Mixtures of JETA-1 and Biodiesel. 2021 , 14, 3282	
346	Future directions of catalytic chemistry. 2021 ,	1
345	Selective catalytic hydrogenation of biomass derived furans to secondary alcohols using Pt/polyoxometalate catalysts under mild reaction conditions. 2021 , 15, 1431-1446	1
344	The Role of Nitrogen-doping in the Catalytic Transfer Hydrogenation of Phenol to Cyclohexanone with Formic Acid over Pd supported on Carbon Nanotubes. 2021 , 27, 10948-10956	5
343	Assessment of extraction options for a next-generation biofuel: Recovery of bio-isobutanol from aqueous solutions. 2021 , 21, 653-665	5
342	Preparation and characterization of biochar derived from the fruit seed of Cedrela odorata L and evaluation of its adsorption capacity with methylene blue. 2021 , 21, 100421	13
341	Selective oxidation of 5-hydroxymethylfurfural to 2,5-diformylfuran over niobium incorporated MCM-41 catalyst. 2021 , 510, 111682	4

- 340 Hydrodeoxygenation of 2,5-dimethyltetrahydrofuran over bifunctional metal-acid catalyst Pt_{0.5}Sn_{2.5}H_{0.5}PW₁₂O₄₀ in the gas phase: Kinetics and mechanism. **2021**, 510, 111711 1
- 339 Improving the Conversion of Biomass in Catalytic Pyrolysis via Intensification of Biomass-Catalyst Contact by Co-Pressing. **2021**, 11, 805 3
- 338 Mini-Review on the Synthesis of Furfural and Levulinic Acid from Lignocellulosic Biomass. **2021**, 9, 1234 4
- 337 Recent Progress in the Synthesis of Heterocycles through Base Metal-Catalyzed Acceptorless Dehydrogenative and Borrowing Hydrogen Approach. **2021**, 2021, 3690-3720 5
- 336 Strong Metal-Support Interaction for 2D Materials: Application in Noble Metal/TiB Heterointerfaces and their Enhanced Catalytic Performance for Formic Acid Dehydrogenation. **2021**, 33, e2101536 13
- 335 Selectivity control in hydrogenation through adaptive catalysis using ruthenium nanoparticles on a CO-responsive support. **2021**, 13, 916-922 11
- 334 Synthesis of Furanic Ethers from Furfuryl Alcohol for Biofuel Production. **2021**, 35, 12725-12733 5
- 333 Selective degradation and oxidation of hemicellulose in corncob to oligosaccharides: From biomass into masking agent for sustainable leather tanning. **2021**, 413, 125425 12
- 332 Sustainable Production of Furfural in Biphasic Reactors Using Terpenoids and Hydrophobic Eutectic Solvents. **2021**, 9, 10266-10275 5
- 331 Selective hydroconversion of 2-methylfuran to pentanols on MWNT-supported Pt catalyst at ambient temperature. 1 2
- 330 Adsorption-Enhanced Glucan Oligomer Production from Cellulose Hydrolysis over Hyper-Cross-Linked Polymer in Molten Salt Hydrate. **2021**, 3 3
- 329 Integration of data-intensive, machine learning and robotic experimental approaches for accelerated discovery of catalysts in renewable energy-related reactions. **2021**, 1, 100049 2
- 328 Selective transfer hydrogenation of biomass derived furanic molecules using cyclohexanol as a hydrogen donor over nanostructured Cu/MgO catalyst. **2021**, 513, 111812 2
- 327 Biochar-driven simplification of the compositions of cellulose-pyrolysis-derived biocrude oil coupled with the promotion of hydrogen generation. **2021**, 334, 125251 9
- 326 Raney Ni as a Versatile Catalyst for Biomass Conversion. **2021**, 11, 10508-10536 8
- 325 Synthesis, Characterization and Mechanical Properties of Novel Bio-Based Polyurethane Foams Using Cellulose-Derived Polyol for Chain Extension and Cellulose Citrate as a Thickener Additive. **2021**, 13, 4 4
- 324 Recent trends and future perspectives of lignocellulose biomass for biofuel production: a comprehensive review. 1 6
- 323 Reactor Selection for Upgrading Hemicelluloses: Conventional and Miniaturised Reactors for Hydrogenations. **2021**, 9, 1558 0

322	Advances in Understanding the Selective Hydrogenolysis of Biomass Derivatives. 2021 , 11, 11193-11232	11
321	Overexpression of Oxidoreductase YghA Confers Tolerance of Furfural in Ethanogenic Escherichia coli Strain SSK42. 2021 , 87, e0185521	0
320	Review on Reaction Pathways in the Catalytic Upgrading of Biomass Pyrolysis Liquids.	4
319	Influence of functional groups on low-temperature combustion chemistry of biofuels. 2021 , 86, 100925	14
318	Homogeneously catalyzed acceptorless dehydrogenation of alcohols: A progress report. 2021 , 443, 213967	9
317	Electroreductive 5-Hydroxymethylfurfural Dimerization on Carbon Electrodes. 2021 , 14, 5245-5253	1
316	Leveraging De Donder relations for a thermodynamically rigorous analysis of reaction kinetics in liquid media. 2021 ,	2
315	Upgrading the Strategy of Multistage Torrefaction Liquid by the Selective Oxidation Reaction Route Using a Reusable MgO-Based Au/Al ₂ O ₃ Catalyst.	2
314	Toward efficient single-atom catalysts for renewable fuels and chemicals production from biomass and CO ₂ . 2021 , 292, 120162	35
313	Unimolecular and bimolecular formic acid decomposition routes on dispersed Cu nanoparticles. 2021 , 404, 814-814	0
312	Interactions of Cellulose Model Compound D-Cellobiose with Selected Metal Chlorides in Water: Identification of Chelating Oxygen Atoms. 2021 , 2021, 4968-4973	0
311	Critical temperatures, pressures, heat capacities, and thermal diffusivities of three furanic biofuels. 2021 , 161, 106539	0
310	A review on lignocellulosic biomass waste into biochar-derived catalyst: Current conversion techniques, sustainable applications and challenges. 2021 , 154, 106245	5
309	Polymerization of sugars/furan model compounds and bio-oil during the acid-catalyzed conversion: A review. 2021 , 222, 106958	4
308	Photo-/thermal synergies in heterogeneous catalysis: Towards low-temperature (solar-driven) processing for sustainable energy and chemicals. 2021 , 296, 120320	14
307	In situ catalytic fast pyrolysis over CeO ₂ catalyst: Impact of biomass source, pyrolysis temperature and metal ion. 2021 , 177, 1372-1381	7
306	Biofuels and biorefineries: Development, application and future perspectives emphasizing the environmental and economic aspects. 2021 , 297, 113268	22
305	Facile construction of Fe/Pd-doped graphite carbon nitride for effective removal of doxorubicin: Performance, mechanism and degradation pathways. 2021 , 299, 120686	2

304	Effect of mechano-chemical pretreatment on valorizing plant waste for 5-hydroxymethylfurfural under microwave hydrothermal treatment. 2021 , 180, 536-543	5
303	Role of dolomite as an in-situ CO ₂ sorbent and deoxygenation catalyst in fast pyrolysis of beechwood in a bench scale fluidized bed reactor. 2021 , 224, 107029	4
302	Variation of lignocellulosic biomass structure from torrefaction: A critical review. 2021 , 152, 111698	5
301	Selective aqueous phase hydrogenation of xylose to xylitol over SiO ₂ -supported Ni and Ni-Fe catalysts: Benefits of promotion by Fe. 2021 , 298, 120564	4
300	The influence of long-term exposure of Mg ₂ Al mixed oxide at ambient conditions on its transition to hydrotalcite. 2021 , 304, 122556	2
299	Advances in liquefaction for the production of hydrocarbon biofuels. 2022 , 127-176	1
298	Hydrocarbon biorefinery: A sustainable approach. 2022 , 1-44	0
297	Production of biobased materials from lignocellulosic biomass. 2022 , 165-186	
296	Synthesis of long chain alkanes via aldol condensation over modified chitosan catalyst and subsequent hydrodeoxygenation. 2022 , 428, 131368	6
295	Single-atom catalysts for biomass-derived drop-in chemicals. 2022 , 63-100	1
294	Cr-Mn bimetallic functionalized USY zeolite monolithic catalyst for direct production of 2, 5-Furandicarboxylic acid from raw biomass. 2022 , 429, 132173	2
293	2-MeTHF. 2021 , 75-98	1
292	Energy and environmental catalysis driven by stress and temperature-variation.	10
291	Kinetics of furfural electrochemical hydrogenation and hydrogenolysis in acidic media on copper.	2
290	Use of ensiled biomass sorghum increases ionic liquid pretreatment efficiency and reduces biofuel production cost and carbon footprint. <i>Green Chemistry</i> , 2021 , 23, 3127-3140	10 16
289	Selective hydrogenolysis of furfural into fuel-additive 2-methylfuran over a rhenium-promoted copper catalyst. 2021 , 5, 1379-1393	2
288	Recent Advances in Biomass Gasification: A Review. 2021 , 239-257	
287	Upgrading of Bio-Syngas via Steam-CO ₂ Reforming Using Rh/Alumina Monolith Catalysts. 2021 , 11, 180	1

286	The thousand faces of Cu-doped porous mixed oxides (Cu-PMO) in the conversion of renewable resources and beyond. 2021 , 59-98	2
285	Catalytic Conversion of Cellulose to Levoglucosenone Using Propylsulfonic Acid Functionalized Sba-15 and H ₂ SO ₄ in Tetrahydrofuran.	
284	A comprehensive study on butanolysis of furfuryl alcohol to butyl levulinate using tungstated zirconia and sulfonated carbon catalysts. 2021 , 4, 111-121	3
283	The first-principles-based microkinetic simulation of the dry reforming of methane over Ru(0001). 2021 , 11, 1395-1406	12
282	An Efficient and Facile Synthesis of 2-Amino-4H-pyrans & Tetrahydrobenzo[b]pyrans Catalysed by WEMFSA at Room Temperature. 2020 , 5, 1896-1906	19
281	Hydrodeoxygenation (HDO) of Bio-oil Model Compounds with Synthesis Gas Using a Water-Gas Shift Catalyst with a Mo/Co/K Catalyst. 2015 , 1-34	1
280	Encyclopedia of Sustainability Science and Technology. 2017 , 1-33	3
279	Lignin as Potent Industrial Biopolymer: An Introduction. 2020 , 1-15	7
278	Hydrothermal Conversion of Cellulose into Organic Acids with a CuO Oxidant. 2014 , 31-59	4
277	Production of γ -Valerolactone from Biomass. 2017 , 413-436	1
276	Other Drop-In Liquid Biofuels. 2019 , 405-450	2
275	Bio-Oil and Pyrolytic Oil. 2019 , 181-219	1
274	Biofuels Generation Based on Technical Process and Biomass Quality. 2020 , 37-64	4
273	Biofuel: Types and Process Overview. 2020 , 1-28	2
272	Polyol Synthesis of Cobalt-Copper Alloy Catalysts for Higher Alcohol Synthesis from Syngas. 2017 , 147, 2352-2359	6
271	Review on synthesis and properties of high-energy-density liquid fuels: Hydrocarbons, nanofluids and energetic ionic liquids. 2018 , 180, 95-125	158
270	Process design and evaluation of syngas-to-ethanol conversion plants. 2020 , 269, 122078	6
269	A Combined Experimental and DFT Investigation of Selective Hydrodeoxygenation of Guaiacol over Bimetallic Carbides. 2020 , 34, 16265-16273	7

268	CHAPTER 7:Green Catalysts for Producing Liquid Fuels from Lignocellulosic Biomass. 2015 , 93-110	3
267	CHAPTER 5:Hydrothermal Carbonisation (HTC): History, State-of-the-Art and Chemistry. 2015 , 129-155	5
266	Chapter 2:Introduction to High Pressure CO ₂ and H ₂ O Technologies in Sustainable Biomass Processing. 9-36	1
265	CHAPTER 2:Catalytic Processes and Catalyst Development in Biorefining. 25-64	4
264	CHAPTER 3:Catalysts for Depolymerization of Biomass. 65-97	5
263	The CO ₂ reduction potential for the European industry via direct electrification of heat supply (power-to-heat). 2020 , 15, 124004	36
262	Effect of using microwaves for catalysts preparation on the catalytic acetalization of glycerol with furfural to obtain fuel additives. 2018 , 16, 386-392	13
261	Effect of Ni Reducibility on Anisole Hydrodeoxygenation Activity in the La-Ni/Al ₂ O ₃ Catalytic System. 2020 , 18,	1
260	Thermo-catalytic process for conversion of lignocellulosic biomass to fuels and chemicals: a review. 2018 , 3,	6
259	Catalytic Upgrading of Biomass and its Model Compounds for Fuel Production. 2019 , 23, 517-529	3
258	Core-Magnetic Composites Catalysts for the Valorization and Up-grading of the Renewable Feedstocks: A Minireview. 2019 , 8, 2-19	1
257	Contribution to the production and use of biomass-derived solvents A review. 2020 , 29-56	9
256	Scientific specialties in Green Chemistry. 2020 , 1, 005	2
255	Progress in marine derived renewable functional materials and biochar for sustainable water purification. <i>Green Chemistry</i> , 2021 , 23, 8305-8331	10 9
254	Electrocatalytic hydrogenation of furfural paired with photoelectrochemical oxidation of water and furfural in batch and flow cells.	0
253	Unlocking the potential of biofuels via reaction pathways in van Krevelen diagrams. <i>Green Chemistry</i> ,	10 3
252	Green Production of Phthalic Anhydride from Biobased Furan and Maleic Anhydride by an Acid Resin Catalyst. 2021 , 9, 14385-14394	2
251	Improved Estimation of Bio-Oil Yield Based on Pyrolysis Conditions and Biomass Compositions Using GA- and PSO-ANFIS Models. 2021 , 2021, 2204021	

- 250 Theoretical investigation on the mechanisms and kinetics of OH/NO-initiated atmospheric oxidation of vanillin and vanillic acid. **2021**, 132544 1
- 249 Aqueous-Phase Catalytic Processing in Biomass Valorization to H₂ and Liquid Fuels. **2011**, 37-73
- 248 Future Perspectives for Hydrogen as Fuel in Transportation. **2011**, 243-288
- 247 Quantitative analysis of 5-HMF produced from fructose. **2013**, 45, 27-34 2
- 246 Learning about Sustainability in a Non-Formal Laboratory Context for Secondary Level Students. **2014**, 229-244
- 245 Preparation of 2,5-Diformylfuran through Selective Electro-Catalytic Oxidation with Modified Metallic Electrodes. **2014**, 04, 31-39
- 244 Extraction of Lignin from Biomass for Biofuel Production. **2015**, 391-402 1
- 243 Catalysts for Biofuels. 191-216
- 242 Analytical Approaches in the Catalytic Transformation of Biomass: What Needs to be Analyzed and Why?. **2015**, 83-111
- 241 Biological Feedstocks for Biofuels. **2015**, 53-70
- 240 Hydrodeoxygenation (HDO) of Bio-Oil Model Compounds with Synthesis Gas Using a Water Gas Shift Catalyst with a Mo/Co/K Catalyst. **2017**, 1903-1935
- 239 2 Biomass for fuels Classification and composition. **2016**, 15-36
- 238 Background. **2017**, 1-18
- 237 Catalytic Upgrading of Bio-oil for Production of Drop-In Fuels. **2017**, 1-19
- 236 6 Gas Reforming. **2017**, 357-434
- 235 Learning About Sustainability in a Non-Formal Laboratory Context for Secondary Level Students. **2018**, 663-681
- 234 Hydrogenation of Furfural to Furfuryl Alcohol in the Presence of Ru-Containing Catalysts Based on New Zeolite-like Materials. **2018**, 18, 40-47
- 233 Review: Biofuel Production from Plant and Algal Biomass. **2019**, 12-31 2

232	Biofuels from Renewable Biomass Resources: An Overview of Technologies for Production, Environmental and Economic Impacts. 2020 , 25-47	1
231	Utilization of Hydrolysis Lignin in Compositions Soil-Cements. 2019 , 23, 32-37	2
230	Catalytic C-C Coupling of Furanic Platform Chemicals to High Carbon Fuel Precursors over Supported Ionic Liquids. 2021 , 118421	1
229	Catalytic Synthesis of the Biofuel 5-Ethoxymethylfurfural (EMF) from Biomass Sugars. 2021 , 2021, 1-16	1
228	Hierarchical zeolite for biomass conversion to biofuel: A review. 2022 , 309, 122119	22
227	Cellobiohydrolase: role in cellulosic bioconversion. 2020 , 63-79	1
226	Separation procedures in the identification of the hydrogenation products of biomass-derived hydroxymethylfurfural. 2020 , 39, 88-105	0
225	Production of Esters Based on Waste Vegetable Oils. 2020 , 11, 530-534	
224	Characterization of Lignocellulosic Biomass and Processing for Second-Generation Sugars Production. 2020 , 29-46	1
223	An Overview on Biomass of Bamboo as a Source of Bioenergy. 2020 , 241-265	
222	Utilization of Plant Biomass for the Production of Renewable and Sustainable Biofuels With Zero Carbon Emission. 2020 , 26-43	
221	The Energy Mix in Japan Post-Fukushima. 2020 , 45-55	
220	Deployment of Biogas Production Technologies in Emerging Countries. 2020 , 395-424	
219	Catalytic C(=O) Bond Cleavage of Lignin in a One-Step Reaction Enabled by a Spin-Center Shift. 14181-14187	4
218	Decarbonylation of Furfural to Furan over Titania-supported Palladium Nanoparticles Prepared by a Photo-assisted Deposition Method. 2020 , 63, 204-212	0
217	Learning about Sustainability in a Non-Formal Laboratory Context for Secondary Level Students. 864-879	
216	Nanocatalysts for Biofuels Production. 2021 , 1-26	
215	Catalytic conversion of cellulose to levoglucosenone using propylsulfonic acid functionalized SBA-15 and H ₂ SO ₄ in tetrahydrofuran. 2022 , 156, 106315	0

214	Economical aspect in biomass to biofuel production. 2022 , 395-427	2
213	Impact of Design on the Activity of ZrO ₂ Catalysts in Cellulose Hydrolysis-Dehydration to Glucose and 5-Hydroxymethylfurfural. 2021 , 11, 1359	1
212	Reductive Catalytic Fractionation of Lignocellulosic Biomass: A New Promising Method of its Integrated Processing. 2021 , 21, 425-443	
211	Synthesis of Valerolactone from ethyl levulinate hydrogenation and ethyl 4-hydroxypentanoate lactonization over supported Cu-Ni bimetallic, bifunctional catalysts. 2021 ,	1
210	Impact of Conventional and Sustainable Solvents on the Yield, Selectivity, and Recovery of Curcuminoids from Turmeric.	3
209	Conversion of cyclic xylose into xylitol on Ru, Pt, Pd, Ni, and Rh catalysts: a density functional theory study. 2021 , 23, 26195-26208	1
208	Sustainable production of levulinic acid and its derivatives for fuel additives and chemicals: progress, challenges, and prospects. <i>Green Chemistry</i> , 2021 , 23, 9198-9238	10 7
207	Alcohols as Alternative Fuels for Transport. 2022 , 99-151	
206	Cascade Reaction of Ethanol to Butadiene over Multifunctional Silica-Supported Ag and ZrO ₂ Catalysts.	1
205	Analytical Techniques Applied to Hemicellulose Structure and Functional Characterization. 2022 , 139-170	
204	Hydrotalcite as a deoxygenation catalyst in fast pyrolysis of biomass for the production of high quality bio-oil. 2022 , 161, 105431	1
203	Low-temperature reduction of bio-based cinnamaldehyde to α -(un)saturated alcohols enabled by a waste-derived catalyst. 2022 , 162, 106391	0
202	Value addition of lignin to zingerone using recyclable AlPO ₄ and Ni/LRC catalysts. 2022 , 431, 134130	0
201	Machine learning prediction of bio-oil characteristics quantitatively relating to biomass compositions and pyrolysis conditions. 2022 , 312, 122812	6
200	Investigation of the combination of fractional condensation and water extraction for improving the storage stability of pyrolysis bio-oil. 2022 , 314, 123019	2
199	Integrative technical, economic, and environmental sustainability analysis for the development process of biomass-derived 2,5-furandicarboxylic acid. 2022 , 157, 112059	2
198	Techniques Used in the Process of Biodiesel Production and Its Merits and Demerits from a Historical Perspective. 2022 , 535-556	
197	Advancements in the Conversion of Lipid-Rich Biowastes and Lignocellulosic Residues into High-Quality Road and Jet Biofuels Using Nanomaterials as Catalysts. 2022 , 10, 187	0

- 196 Novel Sulfonic Acid Polystyrene Microspheres for Alcoholysis of Furfuryl Alcohol to Ethyl Levulinate. 1
- 195 Green heterogeneous catalysis. **2022**, 193-242
- 194 Sulfur-treated TiO shows improved alcohol dehydration activity and selectivity.. **2022**, 14, 2848-2858 0
- 193 Production of water-soluble sugar from cellulose and corn stover via molten salt hydrate impregnation and separation. **2022**, 29, 879-891 0
- 192 Visible-Light-Induced Selective C-C Bond Cleavage Reactions of Dimeric ED-4 and E1 Lignin Model Substrates Utilizing Amine-Functionalized Fullerene.. **2022**, 0
- 191 Biofuels and Fine Chemicals From Lignocellulosic Biomass: A Sustainable and Circular Economy. **2022**, 41-53
- 190 Two-step liquefaction process of lignocellulose in acetone/H₂O medium for non-enzymatic sugar production. 1 0
- 189 Furfural is a versatile, biomass-derived platform chemical for the production of renewable chemicals. *Green Chemistry*, **2022**, 24, 510-551 10 8
- 188 Hydrodeoxygenation of 2,5-dimethyltetrahydrofuran over bifunctional Pt-CsHPWO catalyst in the gas phase: enhancing effect of gold.. **2022**, 12, 2287-2291
- 187 An integrated process for the valorization of corn stover promoted by NaCl in a GVL/H₂O system. *Green Chemistry*, 10 2
- 186 Effect of postsynthesis preparation methods on catalytic performance of Ti-Beta zeolite in ketonization of propionic acid. **2022**, 330, 111625 1
- 185 Metal vs metal free oxidation of 5-Hydroxymethylfurfural and Levoglucosenone to biosourced chemicals.. **2022**, 0
- 184 Solvents and ions for pretreatment in lignocellulosic biorefineries. **2022**, 113, 241-257 0
- 183 Recent advances in production of bioenergy carrying molecules, microbial fuels, and fuel design - A review. **2022**, 316, 123330 2
- 182 Catalytic transformation of biomass-based feedstocks in green solvents. **2022**, 673-720
- 181 Toward low-cost biological and hybrid biological/catalytic conversion of cellulosic biomass to fuels. 7
- 180 Biochemicals and materials production: an introduction. **2022**, 1-8
- 179 Sustainable Sorbitol Dehydration to Isosorbide using Solid Acid Catalysts: Transition from Batch Reactor to Continuous Flow System.. **2021**, 2

178	Furfural Hydrogenation over Cu, Ni, Pd, Pt, Re, Rh and Ru Catalysts: ab initio Modelling of Adsorption, Desorption and Reaction Micro-kinetics. 2022 , 436, 135070		3
177	High yield of reducing sugar from enzymolysis of cellulose in supercritical carbon dioxide system. 2022 , 178, 114632		0
176	Selective production of alkanes and fatty alcohol via hydrodeoxygenation of palmitic acid over red mud-supported nickel catalysts. 2022 , 314, 122780		0
175	The biorefinery. 2022 , 257-292		
174	Circular bioeconomy perspective of agro-waste-based biochar. 2022 , 223-243		0
173	Highly efficient and selective aqueous phase hydrogenation of aryl ketones, aldehydes, furfural and levulinic acid and its ethyl ester catalyzed by phosphine oxide-decorated polymer immobilized ionic liquid-stabilized ruthenium nanoparticles.		1
172	Structure-Activity Relationships Over Ru-Based Catalysts in Anisole Demethoxylation: Spectroscopic and Kinetic Studies.		
171	Catalytic Hydropyrolysis and Hydrodeoxygenation of Biomass and Model Compounds for Fuels and Chemicals. 2022 , 293-332		
170	Conversion of biomass-derived feedstocks into value-added chemicals over single-atom catalysts. <i>Green Chemistry</i> , 2022 , 24, 2267-2286	10	4
169	Plasma technology for lignocellulosic biomass conversion toward an electrified biorefinery. <i>Green Chemistry</i> , 2022 , 24, 2680-2721	10	1
168	Recent advances in biomass-derived platform chemicals to valeric acid synthesis. 2022 , 46, 5907-5921		2
167	Agricultural Biomass to Adipic Acid—An Industrially Important Chemical. 2022 , 6, em0184		1
166	Nano-H-ZSM-5 with Short b-Axis Channels as a Highly Efficient Catalyst for the Synthesis of Ethyl Levulinate from Furfuryl Alcohol. 2022 , 10, 3808-3816		1
165	Identification of Crucial Intermediates in the Formation of Humins from Cellulose-Derived Platform Chemicals Under Brønsted Acid Catalyzed Reaction Conditions.. 2022 ,		1
164	Ordered Mesoporous Carbon Encapsulating KF: Efficient and Stable Solid Base for Biodiesel and Fine Chemical Catalytic Synthesis. 2022 , 10, 3477-3487		0
163	Boron modified Cu/Al ₂ O ₃ catalysts for the selective reductive amination of levulinic acid to N-substituted pyrrolidinones.		2
162	Recent advances in amine catalyzed aldol condensations. 1-83		0
161	Lewis acid-catalyzed Diels-Alder cycloaddition of 2,5-dimethylfuran and ethylene: a density functional theory investigation. 2022 , 141, 1		

160	Triazolium-based Ionic Liquids Supported on Alumina as Catalysts to Produce 5-HMF from Fructose.	0
159	Kinetics and Reaction Mechanisms of Acetic Acid Hydrodeoxygenation over Pt and PtMo Catalysts.	1
158	RDRP (Meth)acrylic Homo and Block Polymers from Lignocellulosic Sugar Derivatives. 2200005	1
157	Recent approaches on the optimization of biomass gasification process parameters for product H ₂ and syngas ratio: a review. 1	0
156	Cu-Catalyzed Dual C-O Bonds Cleavage of Cyclic Ethers with Carboxylic Acids, NaI, and TMSCF to Give Iodoalkyl Ester.. 2022,	1
155	Selective hydrogenation of HMF to 1-hydroxy-2,5-hexanedione by biochar supported Ru catalysts.. 2022,	1
154	Cleaner production and downstream processing of bio-based 2,3-butanediol: A review. 2022, 343, 131033	2
153	Secondary organic aerosol formation from photooxidation of β -butyro and β -valero-lactone: A combined experimental and theoretical study. 2022, 276, 119051	0
152	Solvent-free oxidative esterification of furfural to 2-methyl furoate using novel copper-exchanged tungstophosphoric acid supported on montmorillonite K-10 catalyst. 2022, 524, 112256	0
151	Promoted ketonization of bagasse pyrolysis gas over red mud-based oxides. 2022, 190, 11-18	0
150	Biomass-based fuel blends as an alternative for the future heavy-duty transport: A review. 2022, 161, 112391	2
149	Advances in understanding the humins: Formation , prevention and application. 2022, 10, 100062	0
148	High energy density renewable fuels based on multicyclic sesquiterpene: Synthesis and performance. 2022, 318, 123665	0
147	Natural grass to all-biomass biodegradable tape and superior oil-water separation fabric. 2022, 182, 106320	0
146	Influence of the presence of impurities and of the biomass source on the performance of Ru catalysts in the hydrolytic hydrogenation of cellulose towards β -valerolactone. 2022, 319, 123646	0
145	A durable Ni/La-Y catalyst for efficient hydrogenation of β -valerolactone into pentanoic biofuels. 2022, 70, 347-355	2
144	Deactivation by Potassium Accumulation on a Pt/TiO ₂ Bifunctional Catalyst for Biomass Catalytic Fast Pyrolysis. 2022, 12, 465-480	1
143	In-Depth Analysis of Key Factors Affecting the Catalysis of Oxidized Carbon Blacks for Cellulose Hydrolysis. 2022, 12, 892-905	1

142	Mechanism Study on Nitrogen Migration and Catalytic Denitrification during the Pyrolysis of Lysine and Tryptophan. 2022 , 36, 502-513		0
141	Recent Advances in Reductive Upgrading of 5-Hydroxymethylfurfural via Heterogeneous Thermocatalysis. 2021 ,		0
140	Heterogeneous strategies for selective conversion of lignocellulosic polysaccharides. 2022 , 29, 3059-3077		1
139	Sustainable production of furan-based oxygenated fuel additives from pentose-rich biomass residues. 2022 , 100222		
138	Application of the Spin-Center Shift in Organic Synthesis.		3
137	Enhanced production of aromatic hydrocarbons and phenols by catalytic co-pyrolysis of fruit and garden pruning wastes. 2022 , 10, 107738		0
136	Data_Sheet_1.pdf. 2018 ,		
135	Research progress on the role of common metal catalysts in biomass pyrolysis: a state-of-the-art review. <i>Green Chemistry</i> ,	10	1
134	Ambient temperature cross-linking of a sustainable, cardanol-based cyanate ester via synergistic thiol-ene copolymerization.		1
133	Single-Atom Cu Catalyst in a Zirconium-Based Metal-Organic Framework for Levulinic Acid Hydrogenation to γ -Valerolactone.		
132	Synthesis of renewable diesel and jet fuel range alkanes using 2-methylfuran and cyclohexanone.. 2022 , 12, 12932-12937		
131	High Performance Polyhexahydrotriazine (PHT) Thermoset for the Synthesis of Furanics.		0
130	Potassium-Modified ZSM-5 Catalysts for Methyl Acrylate Formation from Methyl Lactate: The Impact of the Intrinsic Properties on Their Stability and Selectivity.		0
129	Titania Nanotubes-Bonded Sulfamic Acid as an Efficient Heterogeneous Catalyst for the Synthesis of n -Butyl Levulinate.. 2022 , 10, 894965		0
128	Consequences of Intrapore Liquids on Reactivity, Selectivity, and Stability for Aldol Condensation Reactions on Anatase TiO ₂ Catalysts.		0
127	Efficient production of levulinic acid using metal-organic framework catalyst: Role of brønsted acid and flexibility. 2022 , 444, 136566		1
126	Study of γ -Valerolactone production from hydrogenation of levulinic acid over nanostructured Pt-hydrocalcite catalysts at low temperature. 2022 , 323, 124272		2
125	Decomposition of Lignin Models Enabled by Copper-Based Photocatalysis Under Biphasic Conditions. <i>Green Chemistry</i> ,	10	0

- 124 Ru-supported mesoporous melamine polymers as efficient catalysts for selective hydrogenation of aqueous 5-hydroxymethylfurfural to 2,5-bis-(hydroxymethyl)furan. 0
- 123 Pretreatment of Corn Stover by Levulinic Acid-Based Protic Ionic Liquids for Enhanced Enzymatic Hydrolysis. 2
- 122 Recent Progress in Green Conversion of Biomass Alcohol to Chemicals via Aerobic Oxidation. **2022**, 2, 103-115 0
- 121 Conversion of bio-carbohydrates to 5-hydroxymethylfurfural in three-component deep eutectic solvent. **2022**, 12, 14957-14963 1
- 120 Synthesis of biodiesel from fish processing waste by nano magnetic catalyst and its thermodynamic analysis. **2022**, 35, 102115 2
- 119 Complete Utilization of Waste Lignin: Preparation of Lignin-derived Carbon Supports and Conversion of Lignin-derived Guaiacol to Nylon Precursors. 0
- 118 Surface-modified nanomaterial-based catalytic materials for the production of liquid fuels. **2022**, 131-169
- 117 Gasification of hydrolysis lignin with CO₂ in the presence of Fe and Co compounds. **2022**, 32, 402-404 0
- 116 Biodiesel as renewable biofuel produced via enzyme-based catalyzed transesterification. **2022**, 100087 1
- 115 Depolymerization of Lignin by Homogeneous Photocatalysis. **2022**, 1537-1562
- 114 Boundaries and openings of biorefineries towards sustainable biofuel production. **2022**, 3-22
- 113 Impact of Bentonite Clay on In Situ Pyrolysis vs. Hydrothermal Carbonization of Avocado Pit Biomass. **2022**, 12, 655 0
- 112 Reductive Catalytic Fractionation of Lignocellulosic Biomass: A New Promising Method for Its Complex Processing. **2022**, 14, 231-250 1
- 111 Mechanistic Differences between Electrochemical Hydrogenation and Hydrogenolysis of 5-Hydroxymethylfurfural and Their pH Dependence. 1
- 110 Impact of Adsorption Configurations on Alcohol Dehydration over Alumina Catalysts. **2022**, 126, 10073-10080 0
- 109 Beta zeolite as an efficient catalyst for the synthesis of diphenolic acid (DPA) from renewable levulinic acid. **2022**, 1
- 108 Bifunctional Hybrid Organosiliceous Catalysts for Aldol Condensation [Hydrogenation Tandem Reactions of Furfural in Continuous-Flow Reactor. **2022**, 118710 1
- 107 Structure effect of modified biochar in Ru/C catalysts for sugar mixture hydrogenation. **2022**, 163, 106504 1

- 106 Emergent collective dynamics of pusher and puller squirmer rods: swarming, clustering, and turbulence. 2
- 105 Effects of Activated-carbon-supported Nickel on Catalytic Transfer Hydrogenation of Cellulose to Hydrocarbons in a Straight-chain Aliphatic Hydrocarbon Solvent. **2022**, 101, 95-107
- 104  Catalytic hydrogenation of biomass-derived furoic acid to tetrahydrofuroic acid derivatives over Pd/CoOx catalyst in water.
- 103 The Revitalization of the Closer the Better In Zeolite-Tailored Bifunctional Catalysts for Biomass Valorisation.
- 102 Insights into the xylan degradation system of *Cellulomonas* sp. B6: biochemical characterization of rCsXyn10A and rCsAbf62A.
- 101 Recent Advances in Heterogeneous Catalytic Hydrodeoxygenation of Biomass-Derived Oxygenated Furanics Mediated by Formic Acid. **2022**, 100199 1
- 100 Sustainable Efficient Synthesis of Pyrrolidones from Levulinic Acid over Pd/C Catalyst. **2022**, 7,
- 99 Recent advances in supported ionic liquid catalysts for sustainable biomass valorisation to high-value chemicals and fuels. **2022**, 450, 138032 4
- 98 Towards efficient and greener processes for furfural production from biomass: A review of the recent trends. **2022**, 157599 2
- 97 Catalytic Cleavage of the C_αO Bond in Lignin and Lignin-Derived Aryl Ethers over Ni/AlPyOx Catalysts. 9473-9485 0
- 96 Selective Oxidation of Furfural at Room Temperature on a TiO₂-Supported Ag Catalyst. **2022**, 12, 805
- 95 Hydrogenation of Lignin-Derived Feedstocks and Bio-oil using Active and Stable Ruthenium Catalyst. **2022**,
- 94 Acid-Modified Clays for the Catalytic Obtention of 5-Hydroxymethylfurfural from Glucose. **2022**, 6, 57
- 93 Advances in catalytic valorization of cellulose into value-added chemicals and fuels over heterogeneous catalysts. **2022**, 1
- 92 Production of High-Octane Gasolines from Bioethanol on Zn-Modified HZSM-5 Zeolite. **2022**, 77, 222-229
- 91 Progress in Selective Conversion of 5-Hydroxymethylfurfural to DHMF and DMF. **2022**, 7,
- 90 Mechanistic Insights and Rational Design of Ca-Doped CeO₂ Catalyst for Acetic Acid Ketonization.
- 89 Titanate nanotubes covalently bonded sulfamic acid as a heterogeneous catalyst for highly efficient conversion of levulinic acid into n-butyl levulinate biofuels. 0

- 88 CuO NPs catalyzed synthesis of quinolines, pyridines, and pyrroles via dehydrogenative coupling strategy. **2022**, 413, 1017-1027
- 87 A sustainable and environmental benign catalytic process for the production of valuable flavors and fragrances from lignin platform chemicals. **2022**, 187, 115460
- 86 Preparation of porous biochar from heavy bio-oil for adsorption of methylene blue in wastewater. **2022**, 238, 107485 1
- 85 On the role of Zr to facilitate the synthesis of diesel and jet fuel range intermediates from biomass-derived carbonyl compounds over aluminum phosphate. **2023**, 320, 121936 o
- 84 Ionic Liquids-Based Organic Electrolytes for Lignocellulose Pretreatment Towards Enhanced Enzymatic Hydrolysis. **2022**, 1-11 o
- 83 Microflow chemistry and its electrification for sustainable chemical manufacturing. **2022**, 13, 10644-10685 o
- 82 Trimetallic Cu-Ni-Re/Hf Catalyst for the Direct Conversion of Furfural to 2-Methyltetrahydrofuran. o
- 81 Biotransformations of carbohydrates in ionic liquids. **2022**, 209-231 o
- 80 CuO NPs Catalyzed Synthesis of Quinolines, Pyridines, and Pyrroles Via Dehydrogenative Coupling Strategy. o
- 79 Biofuel Generation Process. **2022**, 111-139 o
- 78 Walnut Shell Biowaste Valorization via HTC Process for the Removal of Some Emerging Pharmaceutical Pollutants from Aqueous Solutions. **2022**, 23, 11095 o
- 77 CO Hydrogenolysis of C₃-C₄ Polyols Selectively to Terminal Diols over Pt/W/SBA-15 Catalysts. **2022**, 12, 1070 o
- 76 Valorization of Microalgae Biomass to Biofuel Production: A review. **2022**, 7, 100139 o
- 75 Preparation of thermal-responsive Pickering emulsion by ATRP modified lignin microspheres. 1-11 o
- 74 Lignocellulosic Biomass and Conversion Technology. **2022**, 83-97 o
- 73 Aqueous conversion of monosaccharides to furans: were we wrong all along to use catalysts?. **2022**, 24, 8523-8537 o
- 72 Deactivation of macroporous ion-exchange resins by acetonitrile and inhibition by water in the simultaneous synthesis of ethyl tert-butyl ether (ETBE) and tert-amyl ethyl ether (TAEE). o
- 71 Influence of Pore Size in Benzoin Condensation of Furfural Using Heterogenized Benzimidazole Organocatalysts. o

- 70 Preparation and Evaluation of Performance and Mechanism of Gallic Acid Rubber Powder/Microalgae bio-oil/Styrene Block Copolymers Composite Modified Asphalt. 0
- 69 From Lignin to Chemicals: An Expedition from Classical to Modern Catalytic Valorization Technologies. **2022**, 94, 1611-1627 0
- 68 Preliminary Studies on the Electrochemical Conversion of Liquefied Forest Biomass. **2022**, 3, 553-575 1
- 67 Activity-based models to predict kinetics of levulinic acid esterification. 0
- 66 Catalyst Deactivation and Its Mitigation during Catalytic Conversions of Biomass. 13555-13599 0
- 65 Analysis of the Effect of Fe₂O₃ Addition in the Combustion of a Wood-Based Fuel. **2022**, 15, 7740 0
- 64 Catalytic Esterification of Levulinic Acid into the Biofuel n-Butyl Levulinate over Nanosized TiO₂ Particles. **2022**, 12, 3870 0
- 63 Application of thermogravimetric analysis method for the characterisation of products from triglycerides during biodiesel production. **2022**, 168, 105766 0
- 62 Comparative investigation on the catalytic performance of HT/SBA-15 and SBA-15/HT composites for the isomerization of glucose to fructose. **2022**, 286, 116052 0
- 61 Role of micellar nanoreactors in organic chemistry: Green and synthetic surfactant review. **2022**, 30, 100875 0
- 60 Kinetics of H-abstraction from isopentanol and subsequent dissociation and isomerization. **2022**, 246, 112393 0
- 59 One-pot multi-step synthesis of gamma-valerolactone from furfuryl alcohol: Microwave vs continuous flow reaction studies. **2023**, 334, 126439 1
- 58 Trimetallic Cu-Ni-Re/H₂ catalyst for the direct conversion of furfural to 2-Methyltetrahydrofuran. **2023**, 454, 139746 0
- 57 Single-atom Cu catalyst in a zirconium-based metal-organic framework for biomass conversion. **2023**, 454, 140156 0
- 56 Bottom-up Hydrothermal Carbonization for the Precise Engineering of Carbon Materials. **2022**, 101048 1
- 55 Combined conversion of lignocellulosic biomass into high-value products with ultrasonic cavitation and photocatalytic produced reactive oxygen species - A review. **2022**, 128333 1
- 54 Recent applications of nickel and nickel-based bimetallic catalysts for hydrodeoxygenation of biomass-derived oxygenates to fuels. 0
- 53 Sustainable Process Intensification for Biomass Valorization. **2022**, 1-19 0

52	Talc modified by milling and alkali activation: Physico-chemical characterization and application in base catalysis. 2023 , 232, 106768	0
51	A review of waste-to-hydrogen conversion technologies for solid oxide fuel cell (SOFC) applications: Aspect of gasification process and catalyst development. 2023 , 329, 117077	1
50	Chemical transformations of 5-hydroxymethylfurfural to highly added value products: Present and future.	2
49	MOF-derived bimetallic NiCo nanoalloys for the hydrogenation of biomass-derived levulinic acid to Valerolactone.	1
48	Ru-Catalyzed C?C Bond Formation Through Alcohol Dehydrogenative Coupling Strategy. 1-69	0
47	Current Challenges and Perspectives for the Catalytic Pyrolysis of Lignocellulosic Biomass to High-Value Products. 2022 , 12, 1524	1
46	Manganese-catalysed Selective Upgrading of Primary Alcohols with Ethanol under Solvent-free Conditions.	0
45	Larix Sibirica Arabinogalactan Hydrolysis over Zr-SBA-15; Depolymerization Insight. 2022 , 27, 8756	0
44	Highly Efficient Fractionation of Cornstalk into Noncondensed Lignin, Xylose, and Cellulose in Formic Acid. 2022 , 70, 15430-15438	0
43	Zeolitic Imidazolate Framework Decorated Molybdenum Carbide Catalysts for Hydrodeoxygenation of Guaiacol to Phenol. 2022 , 12, 1605	1
42	Unprecedented rapid synthesis of diesel precursors from biomass derived furanics over aluminum-doped mesoporous silica spheres catalysts.	0
41	Levulinic Acid Production from Waste Corncob Biomass Using an Environmentally Benign WO ₃ -Grafted ZnCo ₂ O ₄ @CeO ₂ Bifunctional Heterogeneous Catalyst.	0
40	Elucidation of the Roles of Water on the Reactivity of Surface Intermediates in Carboxylic Acid Ketoneization on TiO ₂ .	0
39	Preliminary Study on the Thermal Behavior and Chemical-Physical Characteristics of Woody Biomass as Solid Biofuels. 2023 , 11, 154	0
38	Influence of the Method of Fe Deposition on the Surface of Hydrolytic Lignin on the Activity in the Process of Its Conversion in the Presence of CO ₂ . 2023 , 24, 1279	0
37	Boosting catalytic performance of Co-N-C derived from ZIF-67 by mesoporous silica encapsulation for chemoselective hydrogenation of furfural.	0
36	Highly Efficient Oxidation of Biomass Xylose to Formic Acid with CeO _x -Promoted MnO _x Catalyst in Water.	0
35	Ionic Liquids-Based Organic Electrolytes for Lignocellulose Pretreatment Towards Enhanced Enzymatic Hydrolysis. 2022 , 801-811	0

- 34 New insights into the base catalyzed depolymerization of technical lignins: a systematic comparison. **2023**, 13, 4898-4909 o
- 33 Bioethanol Production From Biomass Extracted From Sunn Hemp Seed. **2023**, 241-263 o
- 32 Copper-Catalyzed Decarboxylative Elimination of Carboxylic Acids to Styrenes. **2023**, 88, 1713-1719 o
- 31 Oil and gas pathway to net-zero: Review and outlook. **2023**, 45, 101048 1
- 30 A Study on the Conversion of Ligninolytic Biomass to Biofuels. **2023**, 46-68 o
- 29 The selective ethanol Guerbet condensation over alkali metal-doped sepiolite. **2023**, o
- 28 Biomass-derived additives as blends in fuels. **2023**, 85-96 o
- 27 Production of Alkyl Levulinates from Carbohydrate-Derived Chemical Intermediates Using Phosphotungstic Acid Supported on Humin-Derived Activated Carbon (PTA/HAC) as a Recyclable Heterogeneous Acid Catalyst. **2023**, 5, 800-812 o
- 26 Role of phosphorous in transition metal phosphides for selective hydrogenolysis of hindered C-O bonds. **2023**, 421, 403-418 o
- 25 Zeolite catalysts for the valorization of biomass into platform compounds and biochemicals/biofuels: A review. **2023**, 178, 113219 o
- 24 Hydrotreatment of pyrolysis bio-oil with non-edible carinata oil and poultry fat for producing transportation fuels. **2023**, 245, 107753 o
- 23 Effects of enzymatic hydrolysis and physicochemical properties of lignocellulose waste through different choline based deep eutectic solvents (DESs) pretreatment. **2023**, 195, 116435 o
- 22 Ocean Resources for the Production of Renewable Chemicals and Materials. **2014**, 443-458 o
- 21 Catalytic Conversion of Low Alcohol to Hydrocarbons: Challenges, Prospects, and Future Work Considerations. **2023**, 2023, 1-28 o
- 20 Syngas from agricultural waste. **2023**, 379-409 o
- 19 Research progress, trends, and future prospects on hydrothermal liquefaction of algae for biocrude production: a bibliometric analysis. o
- 18 Functional carbon-supported nanocatalysts for biomass conversion. **2023**, 538, 113003 o
- 17 Tandem conversion xylose to 2-methylfuran with NiCu/C catalyst. **2023**, 175, 106625 o

- 16 Manganese-catalyzed cross-coupling of primary alcohols with biomass-derived ethanol for upgrading to linear alcohols under solvent-free conditions. ○
- 15 Modeling and Thermodynamic Studies of γ -Valerolactone Production from Bio-derived Methyl Levulinate. **2023**, 7, ○
- 14 Cutting-edge technological advancements in biomass-derived hydrogen production. ○
- 13 A Coverage Self-Consistent Microkinetic Model for Vapor-Phase Formic Acid Decomposition over Pd/C Catalysts. **2023**, 13, 3655-3667 1
- 12 One-Pot Conversion of Furfural to γ -Valerolactone over Co- and Pt-Doped ZSM-5 Catalysts. **2023**, 13, 498 ○
- 11 Time and Potential-Resolved Comparison of Copper Disc and Copper Nanoparticles for Electrocatalytic Hydrogenation of Furfural. 2201467 ○
- 10 Improved Light Hydrocarbon, Furans, and BTEX Production from the Catalytic Assisted Pyrolysis of Agave salmiana Bagasse over Silica Mesoporous Catalysts. **2023**, 13, 548 ○
- 9 Analysis of the Scale of Global Human Needs and Opportunities for Sustainable Catalytic Technologies. **2023**, 66, 338-374 ○
- 8 Preparation and properties of novel tung oil and linseed oil modified lignin phenolic resin. **2023**, 34, 2010-2028○
- 7 An Agro-Waste Catalyzed Facile Synthesis of 1H-Pyrazolo[1,2-b]Phthalazine-5,10-Dione Derivatives: Evaluation of Antioxidant and Electrochemical Studies. 1-23 ○
- 6 Theoretical studies on the mechanism of molybdenum-catalysed deoxydehydration of diols. ○
- 5 Challenges in Syngas Fermentation for Bioethanol Production: Syngas Composition. 1, 9-19 ○
- 4 Capacitive Deionization for the Extraction and Recovery of Butyrate. ○
- 3 Biomass Energy Utilization, Conversion Technologies. **2023**, 1-20 ○
- 2 An Ab Initio RRKM-Based Master Equation Study for Kinetics of OH-Initiated Oxidation of 2-Methyltetrahydrofuran and Its Implications in Kinetic Modeling. **2023**, 16, 3730 ○
- 1 Introduction. **2023**, 1-5 ○