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## The path forward for biofuels and biomaterials

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1505	The Properties of Poly(l-Lactide) Prepared by Different Synthesis Procedure. <b>2011</b> , 19, 419-430	14
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1138	Catalytic fast pyrolysis of furfural over H-ZSM-5 and Zn/H-ZSM-5 catalysts. <b>2012</b> , 419-420, 102-110	139
1137	Mechanisms of microwave irradiation pretreatment for enhancing anaerobic digestion of cattail by rumen microorganisms. <b>2012</b> , 93, 229-236	59
1136	Interaction of the CdSe quantum dots with plant cell walls. <b>2012</b> , 91, 41-7	32
1135	Structural characteristics of nanoparticles produced by hydrothermal pretreatment of cellulose and their applications for electrochemical hydrogen generation. <b>2012</b> , 37, 9514-9523	13
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1133	Dissolving lignocellulosic biomass in a 1-butyl-3-methylimidazolium chloride/water mixture. <b>2012</b> , 37, 227-234	41
1132	Phenolic composition and antioxidant activity of <i>Eucalyptus grandis</i> , <i>E. urograndis</i> ( <i>E. grandis</i> E. urophylla) and <i>E. maidenii</i> bark extracts. <b>2012</b> , 39, 120-127	91
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1129	Hydrodeoxygenation of m-cresol over gallium-modified beta zeolite catalysts. <b>2012</b> , 290, 90-100	104
1128	Copolymerization of glycolic, d,l-lactic and d,l-2-hydroxybutyric acid mixtures present in kraft black liquors. <b>2012</b> , 48, 774-778	11
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1126	High yield production of D-xylonic acid from D-xylose using engineered Escherichia coli. <b>2012</b> , 115, 244-8	94
1125	Modification of cellulose for high glucose generation. <b>2012</b> , 104, 473-9	18
1124	Combination of hot compressed water treatment and wet disk milling for high sugar recovery yield in enzymatic hydrolysis of rice straw. <b>2012</b> , 104, 743-8	49
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1118	Synthesis of glycerin triacetate over molding zirconia-loaded sulfuric acid catalyst. <b>2012</b> , 21, 25-28	11
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1110	Lignocellulosic biomass for bioethanol production: Current perspectives, potential issues and future prospects. <b>2012</b> , 38, 449-467	861
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1105	A facile approach toward surface sulfonation of natural cotton fibers through epoxy reaction. <b>2012</b> , 124, 1744-1750	5
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1099	Preparation of porous spherical ZrO <sub>2</sub> BiO <sub>2</sub> composite particles using templating and its solid acidity by H <sub>2</sub> SO <sub>4</sub> treatment. <b>2012</b> , 47, 341-349	10
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760	Decomposition Factor Analysis Based on Virtual Experiments throughout Bayesian Optimization for Compost-Degradable Polymers. <b>2021</b> , 11, 2820	5
759	One-Pot Selective Synthesis of Renewable p-Xylene by Completely Biomass-Based Ethanol and Dimethylfuran with Functionalized Mesoporous MCM-41. <b>2021</b> , 6, 2400-2409	3
758	Comparison of the effects of different pretreatments on the structure and enzymatic hydrolysis of <i>Miscanthus</i> . <b>2021</b> ,	
757	Rosin-modified o-cresol novolac based vinyl ester thermosets containing methacrylated lignin model compounds: synthesis, curing and thermo-mechanical analysis. <b>2021</b> , 28, 1	2
756	A high ZIF-8 loading PVA mixed matrix membrane on alumina hollow fiber with enhanced ethanol dehydration. <b>2021</b> , 621, 118935	5
755	Tailoring strength of nanocellulose foams by electrostatic complexation. <b>2021</b> , 256, 117547	3
754	Polymer heat-proofing using defibered plants obtained by wet-type bead milling of Japanese cedar.	1
753	Formation of high carbohydrate and acylation condensed lignin from formic acid-acetic acid-H <sub>2</sub> O biorefinery of corn stalk rind. <b>2021</b> , 161, 113165	6
752	Hydrothermal Pretreatment of Wheat Straw: Effects of Temperature and Acidity on Byproduct Formation and Inhibition of Enzymatic Hydrolysis and Ethanolic Fermentation. <b>2021</b> , 11, 487	11

751	Comparative analysis of two recombinant LPMOs from <i>Aspergillus fumigatus</i> and their effects on sugarcane bagasse saccharification. <b>2021</b> , 144, 109746	7
750	Using <i>Amaranthus</i> green proteins as universal biosurfactant and biosorbent for effective enzymatic degradation of diverse lignocellulose residues and efficient multiple trace metals remediation of farming lands. <b>2021</b> , 406, 124727	17
749	Effect of Pretreatments on the Enzymatic Hydrolysis of High-Yield Bamboo Chemo-Mechanical Pulp by Changing the Surface Lignin Content. <b>2021</b> , 13,	3
748	Insights into the genome and secretome of <i>Fusarium metavorans</i> DSM105788 by cultivation on agro-residual biomass and synthetic nutrient sources. <b>2021</b> , 14, 74	4
747	Production of xylo-oligosaccharides from poplar by acetic acid pretreatment and its impact on inhibitory effect of poplar lignin. <b>2021</b> , 323, 124593	10
746	Tree bark characterization envisioning an integrated use in a biorefinery. 1	3
745	Phosphorus-Free Vanillin-Derived Intrinsically Flame-Retardant Epoxy Thermoset with Extremely Low Heat Release Rate and Smoke Emission. <b>2021</b> , 9, 5268-5277	21
744	Selective Electrochemical Decarboxylation of n-Octanoic Acid to Hydrocarbons on Pt Nanocrystals. <b>2021</b> , 9, 5288-5297	0
743	Molecular alignment descriptor to search for the most stable adsorption sites of saturated cyclic compounds on metal surfaces. <b>2021</b> , 544, 148904	0
742	Waste biorefinery towards a sustainable circular bioeconomy: a solution to global issues. <b>2021</b> , 14, 87	57
741	Developing renewable thermo-hydrothermic bioinorganic materials from bone wastes of slaughterhouses. <b>2021</b> , 1869, 012030	1
740	Nanomechanics of Lignin-Cellulase Interactions in Aqueous Solutions. <b>2021</b> , 22, 2033-2042	12
739	A framework for the design and analysis of integrated multi-product biorefineries from agricultural and forestry wastes. <b>2021</b> , 139, 110687	28
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736	Understanding the local structure of disordered carbons from cellulose and lignin. <b>2021</b> , 55, 587-606	6
735	Hollow Mesoporous Nanoreactors with Encaged PtSn Alloy Nanoparticles for Selective Hydrogenation of Furfural to Furfuryl Alcohol. <b>2021</b> , 60, 6078-6088	4
734	Exergy efficiency of thermochemical syngas-to-ethanol production plants. <b>2021</b> , 3, 1	0



733	Facilitating enzymatic hydrolysis with a novel guaiacol-based deep eutectic solvent pretreatment. <b>2021</b> , 326, 124696	22
732	The effects of cultivar and rotation length (5 vs. 10 years) on biomass production and sustainability of poplar ( <i>Populus</i> spp.) bioenergy plantation. <b>2021</b> , 13, 999-1014	1
731	Effect of crosslinker 3-methacryloxypropylmethyldimethoxysilane on UV-crosslinked PDMS-PTFPMS block copolymer membranes for ethanol pervaporation. <b>2021</b> , 168, 13-24	9
730	Development of highly efficient solid acid catalysts supported on mesoporous KIT-6 for esterification of oleic acid. <b>2021</b> , 38, 966-974	3
729	Briquetting of Dry Sugarcane Leaves by Using Press Mud, Cow Dung, and Buffalo Dung as Binders. <b>2021</b> , 2021, 1-12	0
728	Highly Efficient Semi-Continuous Extraction and In-Line Purification of High EO-4 Butanosolv Lignin. <b>2021</b> , 9, 655983	8
727	Factors Affecting Detoxification of Softwood Enzymatic Hydrolysates Using Sodium Dithionite. <b>2021</b> , 9, 887	1
726	CeO <sub>2</sub> @N/C@TiO <sub>2</sub> Core-shell Nanosphere Catalyst for the Aerobic Oxidation of 5-Hydroxymethylfurfural to 5-Hydroxymethyl-2-Furancarboxylic Acid. <b>2021</b> , 13, 2931-2941	0
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724	Enhanced lactic acid production from PO-pretreated biomass by domesticated <i>Pediococcus pentosaceus</i> without detoxification. <b>2021</b> , 44, 2153-2166	0
723	Tandem Character of Liquid Hot Water and Deep Eutectic Solvent to Enhance Lignocellulose Deconstruction. <b>2021</b> , 14, 2740-2748	13
722	Plant cell wall chemistry: implications for ruminant utilisation. <b>2021</b> , 9, 31-56	3
721	Thermal Catalytic Conversion of Biomass-Derived Glucose to Fine Chemicals. <b>2021</b> , 35, 8602-8616	5
720	Cellulose Recovery from Agri-Food Residues by Effective Cavitation Treatments. <b>2021</b> , 11, 4693	5
719	Valorization of chitin derived N-acetyl-D-glucosamine into high valuable N-containing 3-acetamido-5-acetylfuran using pyridinium-based ionic liquids. <b>2021</b> , 330, 115667	7
718	Analysis of methods for quantifying yeast cell concentration in complex lignocellulosic fermentation processes. <b>2021</b> , 11, 11293	2
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716	Tobacco stalk-derived carbon prepared by one-step molten salt carbonization for supercapacitor. <b>2021</b> , 14, 2151021	1

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7 <sup>14</sup>	Nitrogen-doped Co <sub>3</sub> O <sub>4</sub> nanowires enable high-efficiency electrochemical oxidation of 5-hydroxymethylfurfural. <b>2021</b> , 33, 385-385	4
7 <sup>13</sup>	Productivity and Biomass Properties of Poplar Clones Managed in Short-Rotation Culture as a Potential Fuelwood Source in Georgia. <b>2021</b> , 14, 3016	4
7 <sup>12</sup>	Biorefinery on-demand: Modulating pretreatments to recover lignin, hemicellulose, and extractives as co-products during ethanol production. <b>2021</b> , 163, 113336	14
7 <sup>11</sup>	Biomass Processing via Pyrolysis. <b>2021</b> , 147-180	
7 <sup>10</sup>	Application of real treated wastewater to starch production by microalgae: Potential effect of nutrients and microbial contamination. <b>2021</b> , 169, 107973	7
7 <sup>09</sup>	Acceptorless Dehydrogenative Coupling Reactions by Manganese Pincer Complexes. <b>2021</b> , 10, 1958-1985	5
7 <sup>08</sup>	Diversity of Xanthoparmelia (Parmeliaceae) species in Mexican xerophytic scrub vegetation, evidenced by molecular, morphological and chemistry data. <b>2021</b> , 78, e107	0
7 <sup>07</sup>	Systematic Study of Aromatic-Ring-Targeted Cycloadditions of 5-Hydroxymethylfurfural Platform Chemicals. <b>2021</b> , 14, 3110-3123	3
7 <sup>06</sup>	DETERMINATION OF WOOD COMPOSITION USING SOLID-STATE <sup>13</sup> C NMR SPECTROSCOPY. <b>2021</b> , 55, 461-468	2
7 <sup>05</sup>	Adsorption of 5-Hydroxymethylfurfural, Levulinic Acid, Formic Acid, and Glucose Using Polymeric Resins Modified with Different Functional Groups. <b>2021</b> , 6, 16955-16968	2
7 <sup>04</sup>	Transforming biorefinery designs with 'Plug-In Processes of Lignin' to enable economic waste valorization. <b>2021</b> , 12, 3912	23
7 <sup>03</sup>	Pre-oxidation of lignin precursors for hard carbon anode with boosted lithium-ion storage capacity. <b>2021</b> , 178, 243-255	11
7 <sup>02</sup>	Xylan Structure and Dynamics in Native Grass Cell Walls Investigated by Solid-State NMR Spectroscopy. <b>2021</b> , 6, 15460-15471	5
7 <sup>01</sup>	Potential Uses of Musaceae Wastes: Case of Application in the Development of Bio-Based Composites. <b>2021</b> , 13,	1
7 <sup>00</sup>	One-step molten salt carbonization of tobacco stem for capacitive carbon. <b>2021</b> , 28, 1629	0
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6 <sup>98</sup>	Identifying the origin of local flexibility in a carbohydrate polymer. <b>2021</b> , 118,	12

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695	Applications of Biofuel Cells. <b>2021</b> , 465-482	
694	Genomic Insights Driven Statistical Optimization for Production of Efficient Cellulase by Himalayan Thermophilic <i>Bacillus</i> sp. PCH94 Using Agricultural Waste. 1	3
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681	Improved high-solid loading enzymatic hydrolysis of steam exploded corn stalk using rapid room temperature $\gamma$ -Valerolactone delignification. <b>2021</b> , 165, 113389	13
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676	Hierarchically porous carbon derived from tobacco waste by one-step molten salt carbonization for supercapacitor. 1	0
675	Comparison of Efficiency and Cost of Methods for Conditioning of Slurries of Steam-Pretreated Softwood. <b>2021</b> , 9,	0
674	Triallyl isocyanurate-assisted grafting of maleic anhydride to poly(lactic acid): Efficient compatibilizers for poly(lactic acid)/talc composites with enhanced mechanical properties. <b>2022</b> , 139, 51488	0
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655	Layered graphitic carbon nitride: nano-heterostructures, photo/electro-chemical performance and trends. 1	1
654	Characterization of highly ferulate-tolerant <i>Acinetobacter baylyi</i> ADP1 isolates by a rapid reverse-engineering method.	
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639	Short-time deep eutectic solvents pretreatment enhanced production of fermentable sugars and tailored lignin nanoparticles from abaca. <b>2021</b> , 192, 417-425	10
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119	State-of-the-art in bioresources for sustainable transportation. <b>2022</b> ,	0
118	Overexpression of PtoMYB115 improves lignocellulose recalcitrance to enhance biomass digestibility and bioethanol yield by specifically regulating lignin biosynthesis in transgenic poplar. <b>2022</b> , 15,	0
117	Electrically conducting films prepared from graphite and lignin in pure water. 10,	0
116	Anionic Magnesium and Calcium Hydrides: Transforming CO into Unsaturated Disilyl Ethers.	0
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114	Design of biorefineries towards carbon neutrality: A critical review. <b>2022</b> , 128256	2
113	NIST-UNIFAC parametrization for phase equilibrium calculation of mixtures containing lactones. <b>2022</b> , 113673	0
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110	History repeats itself again: Will the mistakes of the past for ILs be repeated for DESs? From being considered ionic liquids to becoming their alternative: the unbalanced turn of deep eutectic solvents.	2
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104	Recent advances in metal oxide/poly(lactic acid) nanocomposites and their applications. <b>2023</b> , 62, 231-245	0

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