

The strong association of condensed phenolic moieties inhibition of enzymatic hydrolysis

Green Chemistry

18, 4276-4286

DOI: [10.1039/c6gc00685j](https://doi.org/10.1039/c6gc00685j)

Citation Report

#	ARTICLE	IF	CITATIONS
2	Synergetic effect of dilute acid and alkali treatments on fractional application of rice straw. <i>Biotechnology for Biofuels</i> , 2016, 9, 217.	6.2	41
3	Valorizing Recalcitrant Cellulolytic Enzyme Lignin via Lignin Nanoparticles Fabrication in an Integrated Biorefinery. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 2702-2710.	3.2	115
4	Effects of dilute acid and flowthrough pretreatments and BSA supplementation on enzymatic deconstruction of poplar by cellulase and xylanase. <i>Carbohydrate Polymers</i> , 2017, 157, 1940-1948.	5.1	36
5	Effects of organosolv and ammonia pretreatments on lignin properties and its inhibition for enzymatic hydrolysis. <i>Green Chemistry</i> , 2017, 19, 2006-2016.	4.6	145
6	Effect of pretreatment severity on the cellulose and lignin isolated from <i>Salix</i> using ionoSolv pretreatment. <i>Faraday Discussions</i> , 2017, 202, 331-349.	1.6	67
7	Effect of Ethanol Organosolv Lignin from Bamboo on Enzymatic Hydrolysis of Avicel. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 1721-1729.	3.2	31
8	Insights of biomass recalcitrance in natural <i>Populus trichocarpa</i> variants for biomass conversion. <i>Green Chemistry</i> , 2017, 19, 5467-5478.	4.6	82
9	Lignin Alkylation Enhances Enzymatic Hydrolysis of Lignocellulosic Biomass. <i>Energy & Fuels</i> , 2017, 31, 12317-12326.	2.5	56
10	Adsorption of cellobiohydrolases I onto lignin fractions from dilute acid pretreated <i>Broussonetia papyrifera</i> . <i>Bioresource Technology</i> , 2017, 244, 957-962.	4.8	25
11	Relations Between Moso Bamboo Surface Properties Pretreated by Kraft Cooking and Dilute Acid with Enzymatic Digestibility. <i>Applied Biochemistry and Biotechnology</i> , 2017, 183, 1526-1538.	1.4	12
12	Assessment of integrated process based on autohydrolysis and robust delignification process for enzymatic saccharification of bamboo. <i>Bioresource Technology</i> , 2017, 244, 717-725.	4.8	35
13	Stimulation and inhibition of enzymatic hydrolysis by organosolv lignins as determined by zeta potential and hydrophobicity. <i>Biotechnology for Biofuels</i> , 2017, 10, 162.	6.2	67
14	Elucidation of structure-inhibition relationship of monosaccharides derived pseudo-lignin in enzymatic hydrolysis. <i>Industrial Crops and Products</i> , 2018, 113, 368-375.	2.5	52
15	Enhancing Effect of Residual Lignins from <i>D. Sinicus</i> Pretreated with Fenton Chemistry on Enzymatic Digestibility of Cellulose. <i>Energy Technology</i> , 2018, 6, 1755-1762.	1.8	16
16	Fenton Reaction-Oxidized Bamboo Lignin Surface and Structural Modification to Reduce Nonproductive Cellulase Binding and Improve Enzyme Digestion of Cellulose. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 3853-3861.	3.2	63
17	Visualizing cellulase adsorption and quantitatively determining cellulose accessibility with an updated fungal cellulose-binding module-based fluorescent probe protein. <i>Biotechnology for Biofuels</i> , 2018, 11, 105.	6.2	13
18	Fractionating Wheat Straw via Phosphoric Acid with Hydrogen Peroxide Pretreatment and Structural Elucidation of the Derived Lignin. <i>Energy & Fuels</i> , 2018, 32, 5218-5225.	2.5	35
19	Elucidating the Interactive Impacts of Substrate-Related Properties on Lignocellulosic Biomass Digestibility: A Sequential Analysis. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 6783-6791.	3.2	20

#	ARTICLE	IF	CITATIONS
20	Exploring the mechanism of high degree of delignification inhibits cellulose conversion efficiency. <i>Carbohydrate Polymers</i> , 2018, 181, 931-938.	5.1	26
21	Fast spectroscopic monitoring of inhibitors in the 2G ethanol process. <i>Bioresource Technology</i> , 2018, 250, 148-154.	4.8	19
22	Emerging investigator series: design of hydrogel nanocomposites for the detection and removal of pollutants: from nanosheets, network structures, and biocompatibility to machine-learning-assisted design. <i>Environmental Science: Nano</i> , 2018, 5, 2216-2240.	2.2	30
23	One-step process based on the order of hydrothermal and alkaline treatment for producing lignin with high yield and antioxidant activity. <i>Industrial Crops and Products</i> , 2018, 119, 260-266.	2.5	26
24	Acid-Free Ethanol-Water Pretreatment with Low Ethanol Concentration for Robust Enzymatic Saccharification of Cellulose in Bamboo. <i>Bioenergy Research</i> , 2018, 11, 665-676.	2.2	8
25	Effect of alkaline lignin modification on cellulase-lignin interactions and enzymatic saccharification yield. <i>Biotechnology for Biofuels</i> , 2018, 11, 214.	6.2	78
26	One-step process of hydrothermal and alkaline treatment of wheat straw for improving the enzymatic saccharification. <i>Biotechnology for Biofuels</i> , 2018, 11, 137.	6.2	18
27	Characteristics of Lignin Fractions from Dilute Acid Pretreated Switchgrass and Their Effect on Cellobiohydrolase from <i>Trichoderma longibrachiatum</i> . <i>Frontiers in Energy Research</i> , 2018, 6, .	1.2	36
28	SPORL Pretreatment Spent Liquors Enhance the Enzymatic Hydrolysis of Cellulose and Ethanol Production from Glucose. <i>Energy & Fuels</i> , 2018, 32, 7636-7642.	2.5	15
29	Synergistic effects of pH and organosolv lignin addition on the enzymatic hydrolysis of organosolv-pretreated loblolly pine. <i>RSC Advances</i> , 2018, 8, 13835-13841.	1.7	16
30	A structured understanding of cellobiohydrolase I binding to poplar lignin fractions after dilute acid pretreatment. <i>Biotechnology for Biofuels</i> , 2018, 11, 96.	6.2	29
31	Hydrazine hydrate and organosolv synergetic pretreatment of corn stover to enhance enzymatic saccharification and co-production of high-quality antioxidant lignin. <i>Bioresource Technology</i> , 2018, 268, 677-683.	4.8	17
32	Enhanced enzymatic digestibility of mixed wood sawdust by lignin modification with naphthol derivatives during dilute acid pretreatment. <i>Bioresource Technology</i> , 2018, 269, 18-24.	4.8	75
33	Determination of hydroxyl groups in biorefinery resources via quantitative ³¹ P NMR spectroscopy. <i>Nature Protocols</i> , 2019, 14, 2627-2647.	5.5	272
34	Substrate-Related Factors Affecting Cellulosome-Induced Hydrolysis for Lignocellulose Valorization. <i>International Journal of Molecular Sciences</i> , 2019, 20, 3354.	1.8	22
35	Improving enzymatic saccharification of hardwood through lignin modification by carbocation scavengers and the underlying mechanisms. <i>Bioresource Technology</i> , 2019, 294, 122216.	4.8	18
36	Valorizing Waste Lignocellulose-Based Furniture Boards by Phosphoric Acid and Hydrogen Peroxide (Php) Pretreatment for Bioethanol Production and High-Value Lignin Recovery. <i>Sustainability</i> , 2019, 11, 6175.	1.6	9
37	Structural and Thermal Analysis of Softwood Lignins from a Pressurized Hot Water Extraction Biorefinery Process and Modified Derivatives. <i>Molecules</i> , 2019, 24, 335.	1.7	9

#	ARTICLE	IF	CITATIONS
38	Laccase pretreatment of wheat straw: effects of the physicochemical characteristics and the kinetics of enzymatic hydrolysis. <i>Biotechnology for Biofuels</i> , 2019, 12, 159.	6.2	90
39	Co-production of xylooligosaccharides and fermentable sugars from poplar through acetic acid pretreatment followed by poly (ethylene glycol) ether assisted alkali treatment. <i>Bioresource Technology</i> , 2019, 288, 121569.	4.8	57
40	Delignification kinetics and selectivity in poplar cell wall with acidified sodium chlorite. <i>Industrial Crops and Products</i> , 2019, 136, 87-92.	2.5	28
41	Liquid hot water extraction followed by mechanical extrusion as a chemical-free pretreatment approach for cellulosic ethanol production from rigid hardwood. <i>Fuel</i> , 2019, 252, 589-597.	3.4	51
42	Diol pretreatment to fractionate a reactive lignin in lignocellulosic biomass biorefineries. <i>Green Chemistry</i> , 2019, 21, 2788-2800.	4.6	109
43	Coupling the post-extraction process to remove residual lignin and alter the recalcitrant structures for improving the enzymatic digestibility of acid-pretreated bamboo residues. <i>Bioresource Technology</i> , 2019, 285, 121355.	4.8	212
44	Extraction and characterization of lignin from corncob residue after acid-catalyzed steam explosion pretreatment. <i>Industrial Crops and Products</i> , 2019, 133, 241-249.	2.5	54
45	New strategy to elucidate the positive effects of extractable lignin on enzymatic hydrolysis by quartz crystal microbalance with dissipation. <i>Biotechnology for Biofuels</i> , 2019, 12, 57.	6.2	43
46	Comprehensive understanding of the non-productive adsorption of cellulolytic enzymes onto lignins isolated from furfural residues. <i>Cellulose</i> , 2019, 26, 3111-3125.	2.4	11
47	Effect of hydrothermal pretreatment severity on lignin inhibition in enzymatic hydrolysis. <i>Bioresource Technology</i> , 2019, 280, 303-312.	4.8	80
48	NMR Analysis on Molecular Interaction of Lignin with Amino Acid Residues of Carbohydrate-Binding Module from <i>Trichoderma reesei</i> Cel7A. <i>Scientific Reports</i> , 2019, 9, 1977.	1.6	14
49	Pretreatment of Wheat Straw with Phosphoric Acid and Hydrogen Peroxide to Simultaneously Facilitate Cellulose Digestibility and Modify Lignin as Adsorbents. <i>Biomolecules</i> , 2019, 9, 844.	1.8	14
50	Structural and Electrochemical Characteristics of Activated Carbon Derived from Lignin-Rich Residue. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 2471-2482.	3.2	33
51	New Insight into Enzymatic Hydrolysis of the Rice Straw and Poplar: an In-depth Statistical Analysis on the Multiscale Recalcitrance. <i>Bioenergy Research</i> , 2019, 12, 21-33.	2.2	5
52	Overcoming biomass recalcitrance by synergistic pretreatment of mechanical activation and metal salt for enhancing enzymatic conversion of lignocellulose. <i>Biotechnology for Biofuels</i> , 2019, 12, 12.	6.2	72
53	A microwave-assisted aqueous ionic liquid pretreatment to enhance enzymatic hydrolysis of Eucalyptus and its mechanism. <i>Bioresource Technology</i> , 2019, 272, 99-104.	4.8	55
54	Ozone mediated depolymerization and solvolysis of technical lignins under ambient conditions in ethanol. <i>Sustainable Energy and Fuels</i> , 2020, 4, 265-276.	2.5	16
55	High-pressure CO ₂ hydrothermal pretreatment of peanut shells for enzymatic hydrolysis conversion into glucose. <i>Chemical Engineering Journal</i> , 2020, 385, 123949.	6.6	60

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56	Comparative study on the properties of lignin isolated from different pretreated sugarcane bagasse and its inhibitory effects on enzymatic hydrolysis. <i>International Journal of Biological Macromolecules</i> , 2020, 146, 132-140.	3.6	45
57	Fractionation of corn stover for efficient enzymatic hydrolysis and producing platform chemical using p-toluenesulfonic acid/water pretreatment. <i>Industrial Crops and Products</i> , 2020, 145, 111961.	2.5	22
58	Effect of cellulolytic enzyme binding on lignin isolated from alkali and acid pretreated switchgrass on enzymatic hydrolysis. <i>3 Biotech</i> , 2020, 10, 1.	1.1	50
59	Non-productive cellulase binding onto deep eutectic solvent (DES) extracted lignin from willow and corn stover with inhibitory effects on enzymatic hydrolysis of cellulose. <i>Carbohydrate Polymers</i> , 2020, 250, 116956.	5.1	58
60	NMR elucidation of nonproductive binding sites of lignin models with carbohydrate-binding module of cellobiohydrolase I. <i>Biotechnology for Biofuels</i> , 2020, 13, 164.	6.2	11
61	Investigation of a Lignin-Based Deep Eutectic Solvent Using <i>p</i> -Hydroxybenzoic Acid for Efficient Woody Biomass Conversion. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 12542-12553.	3.2	83
62	Adsorption and desorption of cellulase on/from enzymatic residual lignin after alkali pretreatment. <i>Industrial Crops and Products</i> , 2020, 155, 112811.	2.5	19
63	Fabrication of spherical lignin nanoparticles using acid-catalyzed condensed lignins. <i>International Journal of Biological Macromolecules</i> , 2020, 164, 3038-3047.	3.6	34
64	Evaluation of Hydrothermal Pretreatment on Lignocellulose-Based Waste Furniture Boards for Enzymatic Hydrolysis. <i>Applied Biochemistry and Biotechnology</i> , 2020, 192, 415-431.	1.4	9
65	Facilitating enzymatic digestibility of larch by in-situ lignin modification during combined acid and alkali pretreatment. <i>Bioresource Technology</i> , 2020, 311, 123517.	4.8	31
66	Using low carbon footprint high-pressure carbon dioxide in bioconversion of aspen branch waste for sustainable bioethanol production. <i>Bioresource Technology</i> , 2020, 313, 123675.	4.8	13
67	One-Pot Processing of <i>Eucalyptus globulus</i> Wood under Microwave Heating: Simultaneous Delignification and Polysaccharide Conversion into Platform Chemicals. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 10115-10124.	3.2	8
68	Simultaneous and Efficient Production of Furfural and Subsequent Glucose in MTHF/H ₂ O Biphasic System via Parameter Regulation. <i>Polymers</i> , 2020, 12, 557.	2.0	7
69	Optimization of Xylose Recovery in Oil Palm Empty Fruit Bunches for Xylitol Production. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 1391.	1.3	7
70	Optimized screw profile design proved to inhibit re-agglomeration that occurs during extrusion of fine-milled forest residuals for producing fermentable sugars. <i>Industrial Crops and Products</i> , 2020, 154, 112730.	2.5	8
71	Using highly recyclable sodium caseinate to enhance lignocellulosic hydrolysis and cellulase recovery. <i>Bioresource Technology</i> , 2020, 304, 122974.	4.8	9
72	Synthesis, Characterization, and Utilization of a Lignin-Based Adsorbent for Effective Removal of Azo Dye from Aqueous Solution. <i>ACS Omega</i> , 2020, 5, 2865-2877.	1.6	91
73	Exploring surface properties of substrate to understand the difference in enzymatic hydrolysis of sugarcane bagasse treated with dilute acid and sulfite. <i>Industrial Crops and Products</i> , 2020, 145, 112128.	2.5	12

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74	Effects of the advanced organosolv pretreatment strategies on structural properties of woody biomass. <i>Industrial Crops and Products</i> , 2020, 146, 112144.	2.5	103
75	Adsorption and desorption of cellulase on/from lignin pretreated by dilute acid with different severities. <i>Industrial Crops and Products</i> , 2020, 148, 112309.	2.5	28
76	The Synergistic Action of Electro-Fenton and White-Rot Fungi in the Degradation of Lignin. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 99.	2.0	36
77	Bioethanol production from coconut pulp residue using hydrothermal and postalkaline pretreatment. <i>International Journal of Energy Research</i> , 2021, 45, 8140-8150.	2.2	11
78	Comparative study on enzymatic digestibility of acid-pretreated poplar and larch based on a comprehensive analysis of the lignin-derived recalcitrance. <i>Bioresource Technology</i> , 2021, 319, 124225.	4.8	54
79	Charge-oriented strategies of tunable substrate affinity based on cellulase and biomass for improving in situ saccharification: A review. <i>Bioresource Technology</i> , 2021, 319, 124159.	4.8	33
80	Effect of magnesium oxide pretreatment on the delignification and enzymatic hydrolysis of corncob. <i>Industrial Crops and Products</i> , 2021, 161, 113170.	2.5	12
81	Application of intermittent ball milling to enzymatic hydrolysis for efficient conversion of lignocellulosic biomass into glucose. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 136, 110442.	8.2	49
82	A mechanistic study of cellulase adsorption onto lignin. <i>Green Chemistry</i> , 2021, 23, 333-339.	4.6	58
83	Eco-friendly additives in acidic pretreatment to boost enzymatic saccharification of hardwood for sustainable biorefinery applications. <i>Green Chemistry</i> , 2021, 23, 4074-4086.	4.6	64
84	Double bonus: surfactant-assisted biomass pelleting benefits both the pelleting process and subsequent enzymatic saccharification of the pretreated pellets. <i>Green Chemistry</i> , 2021, 23, 1050-1061.	4.6	18
85	How well do isolated lignins mimic the inhibitory behaviour of cell wall lignins during enzymatic hydrolysis of hydrothermally treated softwood?. <i>Biomass Conversion and Biorefinery</i> , 2023, 13, 1967-1978.	2.9	2
86	Challenges and Perspectives of Biorefineries. , 2021, , 1-21.		0
87	Evaluation of chemical additives in hydrothermal pre-treatment of wood for the integrated production of monosugars and hydrolysis lignins for PLA-based biocomposites. <i>Biomass Conversion and Biorefinery</i> , 2023, 13, 7491-7503.	2.9	6
88	Enzymatic conversion of pretreated lignocellulosic biomass: A review on influence of structural changes of lignin. <i>Bioresource Technology</i> , 2021, 324, 124631.	4.8	109
89	Production of xylo-oligosaccharides from poplar by acetic acid pretreatment and its impact on inhibitory effect of poplar lignin. <i>Bioresource Technology</i> , 2021, 323, 124593.	4.8	27
90	Nanomechanics of Ligninâ€™Cellulase Interactions in Aqueous Solutions. <i>Biomacromolecules</i> , 2021, 22, 2033-2042.	2.6	32
91	Organosolv pretreatment assisted by carbocation scavenger to mitigate surface barrier effect of lignin for improving biomass saccharification and utilization. <i>Biotechnology for Biofuels</i> , 2021, 14, 136.	6.2	30

#	ARTICLE	IF	CITATIONS
92	3-D hierarchical porous carbon from oxidized lignin by one-step activation for high-performance supercapacitor. <i>International Journal of Biological Macromolecules</i> , 2021, 180, 51-60.	3.6	43
93	Tunable and functional deep eutectic solvents for lignocellulose valorization. <i>Nature Communications</i> , 2021, 12, 5424.	5.8	116
94	Engineered Sorghum Bagasse Enables a Sustainable Biorefinery with <i>p</i> -Hydroxybenzoic Acid-Based Deep Eutectic Solvent. <i>ChemSusChem</i> , 2021, 14, 5235-5244.	3.6	9
95	Using nucleophilic naphthol derivatives to suppress biomass lignin repolymerization in fermentable sugar production. <i>Chemical Engineering Journal</i> , 2021, 420, 130258.	6.6	35
96	Preparation of reducing sugars from corncob by solid acid catalytic pretreatment combined with in situ enzymatic hydrolysis. <i>Biomass Conversion and Biorefinery</i> , 0, , 1.	2.9	0
97	Unlocking the secret of lignin-enzyme interactions: Recent advances in developing state-of-the-art analytical techniques. <i>Biotechnology Advances</i> , 2022, 54, 107830.	6.0	44
98	Carbocation scavenger assisted acid pretreatment followed by mild alkaline hydrogen peroxide (AHP) treatment for efficient production of fermentable sugars and lignin adsorbents from hardwood biomass. <i>Industrial Crops and Products</i> , 2021, 170, 113737.	2.5	15
99	Mechanisms of bio-additives on boosting enzymatic hydrolysis of lignocellulosic biomass. <i>Bioresource Technology</i> , 2021, 337, 125341.	4.8	27
100	Modification of lignin by various additives to mitigate lignin inhibition for improved enzymatic digestibility of dilute acid pretreated hardwood. <i>Renewable Energy</i> , 2021, 177, 992-1000.	4.3	27
101	Synergistic effects of hydrothermal and deep eutectic solvent pretreatment on co-production of xylo-oligosaccharides and enzymatic hydrolysis of poplar. <i>Bioresource Technology</i> , 2021, 341, 125787.	4.8	50
102	Revealing the influence of metallic chlorides pretreatment on chemical structures of lignin and enzymatic hydrolysis of waste wheat straw. <i>Bioresource Technology</i> , 2021, 342, 125983.	4.8	17
103	Improving Enzymatic Saccharification and Ethanol Production from Hardwood by Deacetylation and Steam Pretreatment: Insight into Mitigating Lignin Inhibition. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 17967-17978.	3.2	37
104	A comparison of different oxidative pretreatments on polysaccharide hydrolyzability and cell wall structure for interpreting the greatly improved enzymatic digestibility of sugarcane bagasse by delignification. <i>Bioresources and Bioprocessing</i> , 2020, 7, .	2.0	38
105	Synergistic Treatment of Alkali Lignin via Fungal Coculture for Biofuel Production: Comparison of Physicochemical Properties and Adsorption of Enzymes Used As Catalysts. <i>Frontiers in Energy Research</i> , 2020, 8, .	1.2	11
106	Enhancing Biobutanol Production from biomass willow by pre-removal of water extracts or bark. <i>Journal of Cleaner Production</i> , 2021, 327, 129432.	4.6	8
107	Liquid hot water as sustainable biomass pretreatment technique for bioenergy production: A review. <i>Bioresource Technology</i> , 2022, 344, 126207.	4.8	103
108	Nuclear magnetic resonance analysis of ascorbic acid assisted lignocellulose decomposition in dilute acid pretreatment and its stimulation on enzymatic hydrolysis. <i>Bioresource Technology</i> , 2022, 343, 126147.	4.8	9
109	Lignin-enzyme interaction: A roadblock for efficient enzymatic hydrolysis of lignocellulosics. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 154, 111822.	8.2	211

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110	Ammonia Fiber Expansion Combined with White Rot Fungi to Treat Lignocellulose for Cultivation of Mushrooms. ACS Omega, 2021, 6, 31689-31698.	1.6	7
111	In-situ lignin modification with polyethylene glycol-epoxides to boost enzymatic hydrolysis of combined-pretreated masson pine. Bioresource Technology, 2022, 344, 126315.	4.8	18
112	The Inhibition of <i>p</i> -Hydroxyphenyl OH in Residual Lignin on Enzymatic Hydrolysis of Cellulose and its Underlying Mechanism. SSRN Electronic Journal, 0, , .	0.4	0
113	Elucidating adsorption behavior of cellulase on lignin through isolated lignin and model compounds. Wood Science and Technology, 0, , 1.	1.4	4
114	The inhibition of <i>p</i> -hydroxyphenyl hydroxyl group in residual lignin on enzymatic hydrolysis of cellulose and its underlying mechanism. Bioresource Technology, 2022, 346, 126585.	4.8	8
115	Insight into the negative effects of lignin on enzymatic hydrolysis of cellulose for biofuel production via selective oxidative delignification and inhibitive actions of phenolic model compounds. Renewable Energy, 2022, 185, 196-207.	4.3	7
116	Separation of surface sediments generated during the pre-hydrolysis via an efficient solvent dissolution and its physicochemical characterization. Industrial Crops and Products, 2022, 177, 114462.	2.5	8
117	Toward a Fundamental Understanding of the Role of Lignin in the Biorefinery Process. Frontiers in Energy Research, 2022, 9, .	1.2	13
118	A Critical Review on the Effect of Lignin Redeposition on Biomass in Controlling the Process of Enzymatic Hydrolysis. Bioenergy Research, 2022, 15, 863-874.	2.2	21
119	The use of steam pretreatment to enhance pellet durability and the enzyme-mediated hydrolysis of pellets to fermentable sugars. Bioresource Technology, 2022, 347, 126731.	4.8	4
120	Structural changes in biomass (yellow poplar and empty fruit bunch) during hydrothermal and oxalic acid pretreatments and their effects on enzymatic hydrolysis efficiency. Industrial Crops and Products, 2022, 178, 114569.	2.5	11
121	Preparation and characterization of aminated co-solvent enhanced lignocellulosic fractionation lignin as a renewable building block for the synthesis of non-isocyanate polyurethanes. Industrial Crops and Products, 2022, 178, 114579.	2.5	15
122	Understanding the toxicity of lignin-derived phenolics towards enzymatic saccharification of lignocellulose for rationally developing effective in-situ mitigation strategies to maximize sugar production from lignocellulosic biorefinery. Bioresource Technology, 2022, 349, 126813.	4.8	14
123	Effect of alkaline/hydrogen peroxide pretreatment on date palm fibers: induced chemical and structural changes and assessment of ethanol production capacity via <i>Pichia anomala</i> and <i>Pichia stipitis</i> . Biomass Conversion and Biorefinery, 2022, 12, 4473-4489.	2.9	3
124	Insight into understanding sequential two-stage pretreatment on modifying lignin physicochemical properties and improving holistic utilization of renewable lignocellulose biomass. Renewable Energy, 2022, 187, 123-134.	4.3	9
125	Lignin condensation inhibition and antioxidant activity improvement in a reductive ternary DES fractionation microenvironment by thiourea dioxide self-decomposition. New Journal of Chemistry, 2022, 46, 8892-8900.	1.4	3
126	2-Naphthol Modification Alleviated the Inhibition of Ethanol Organosolv Lignin on Enzymatic Hydrolysis. SSRN Electronic Journal, 0, , .	0.4	1
127	Structural Changes of Alkali Lignin under Ozone Treatment and Effect of Ozone-Oxidized Alkali Lignin on Cellulose Digestibility. Processes, 2022, 10, 559.	1.3	3

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128	A combination of deep eutectic solvent and ethanol pretreatment for synergistic delignification and enhanced enzymatic hydrolysis for biorefinery process. <i>Bioresource Technology</i> , 2022, 350, 126885.	4.8	32
129	Correlation between physicochemical characteristics of lignin deposited on autohydrolyzed wood chips and their cellulase enzymatic hydrolysis. <i>Bioresource Technology</i> , 2022, 350, 126941.	4.8	7
130	Revealing the mechanism of lignin re-polymerization inhibitor in acidic pretreatment and its impact on enzymatic hydrolysis. <i>Industrial Crops and Products</i> , 2022, 179, 114631.	2.5	20
131	Alleviating Nonproductive Adsorption of Lignin on CBM through the Addition of Cationic Additives for Lignocellulosic Hydrolysis. <i>ACS Applied Bio Materials</i> , 2022, 5, 2253-2261.	2.3	3
132	Fractionation of technical lignin and its application on the lignin/poly-(butylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 587 Td (adipate-c 209, 1065-1074.	3.6	25
134	Efficient pretreatment using dimethyl isosorbide as a biobased solvent for potential complete biomass valorization. <i>Green Chemistry</i> , 2022, 24, 4082-4094.	4.6	20
135	Characterization and In Vitro Cytotoxicity Safety Screening of Fractionated Organosolv Lignin on Diverse Primary Human Cell Types Commonly Used in Tissue Engineering. <i>Biology</i> , 2022, 11, 696.	1.3	5
136	Biomass Pre-Extraction as a Versatile Strategy to Improve Biorefinery Feedstock Flexibility, Sugar Yields, and Lignin Purity. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 6012-6022.	3.2	15
137	Alkylated lignin with graft copolymerization for enhancing toughness of PLA. <i>Journal of Materials Science</i> , 2022, 57, 8687-8700.	1.7	14
138	Lignin fractionation to realize the comprehensive elucidation of structure-inhibition relationship of lignins in enzymatic hydrolysis. <i>Bioresource Technology</i> , 2022, 355, 127255.	4.8	27
139	Enzymatic Conversion of Different Qualities of Refined Softwood Hemicellulose Recovered from Spent Sulfite Liquor. <i>Molecules</i> , 2022, 27, 3207.	1.7	3
140	Efficient sugar production from plant biomass: Current status, challenges, and future directions. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 164, 112583.	8.2	38
141	The alleviation of lignin inhibition on enzymatic hydrolysis of cellulose by changing its ultrastructure. <i>Industrial Crops and Products</i> , 2022, 185, 115108.	2.5	5
142	Evaluating the mechanism of milk protein as an efficient lignin blocker for boosting the enzymatic hydrolysis of lignocellulosic substrates. <i>Green Chemistry</i> , 2022, 24, 5263-5279.	4.6	57
143	Enhanced electrochemical performance of porous carbon from wheat straw as remolded by hydrothermal processing. <i>Science of the Total Environment</i> , 2022, 842, 156905.	3.9	12
144	The bamboo delignification saturation point in alkaline hydrogen peroxide pretreatment and its association with enzymatic hydrolysis. <i>Bioresource Technology</i> , 2022, 359, 127462.	4.8	20
145	Structural Changes in Lignin During Different Pretreatment Ways of Bamboo Biomass and the Effect on Enzymatic Hydrolysis. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
146	Utilization of Guaiacol-Based Deep Eutectic Solvent for Achieving a Sustainable Biorefinery. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0

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147	Enhancing the Sugar Yield of Sugarcane Bagasse Via CuCl ₂ -Catalyzed Organosolv Pretreatment and Additives. SSRN Electronic Journal, 0, , .	0.4	0
148	Utilization of guaiacol-based deep eutectic solvent for achieving a sustainable biorefinery. Bioresource Technology, 2022, 362, 127771.	4.8	15
149	Chemical structure change of lignin extracted from bamboo biomass by maleic acid. International Journal of Biological Macromolecules, 2022, 221, 986-993.	3.6	5
150	One-pot d-lactic acid production using undetoxified acid-pretreated corncob slurry by an adapted <i>Pediococcus acidilactici</i> . Bioresource Technology, 2022, 363, 127993.	4.8	12
151	Impact of structure and composition of different sorghum xylans as substrates on production of xylanase enzyme by <i>Aspergillus fumigatus</i> RSP-8. Industrial Crops and Products, 2022, 188, 115660.	2.5	5
152	Positive role of non-catalytic proteins on mitigating inhibitory effects of lignin and enhancing cellulase activity in enzymatic hydrolysis: Application, mechanism, and prospective. Environmental Research, 2022, 215, 114291.	3.7	12
153	Improve Enzymatic Hydrolysis of Lignocellulosic Biomass by Modifying Lignin Structure via Sulfite Pretreatment and Using Lignin Blockers. Fermentation, 2022, 8, 558.	1.4	26
154	Insight into the Mechanism of Humic Acid's Dissolution Capacity for Lignin in the Biomass Substrates. ACS Sustainable Chemistry and Engineering, 2022, 10, 14648-14657.	3.2	5
155	2-Naphthol modification alleviated the inhibition of ethanol organosolv lignin on enzymatic hydrolysis. Renewable Energy, 2022, 200, 767-776.	4.3	6
156	The pre-addition of "blocking" proteins decreases subsequent cellulase adsorption to lignin and enhances cellulose hydrolysis. Bioresource Technology, 2023, 367, 128276.	4.8	1
157	Enhancing the co-production of sugars from sugarcane bagasse via CuCl ₂ -catalyzed organosolv pretreatment and additives. Fuel Processing Technology, 2023, 241, 107629.	3.7	1
158	Oil structuring properties of electrospun Kraft lignin/cellulose acetate nanofibers for lubricating applications: influence of lignin source and lignin/cellulose acetate ratio. Cellulose, 2023, 30, 1553-1566.	2.4	8
159	High-performance and environmentally friendly acrylonitrile butadiene styrene/wood composite for versatile applications in furniture and construction. Advanced Composites and Hybrid Materials, 2023, 6, .	9.9	18
160	Role of extractable lignin in enzymatic hydrolysis of hydrothermally pretreated hardwood. Industrial Crops and Products, 2023, 193, 116150.	2.5	1
161	Comparison of organosolv pretreatment of masson pine with different solvents in promoting delignification and enzymatic hydrolysis efficiency. Fuel, 2023, 338, 127361.	3.4	15
162	How can vanillin improve the performance of lignocellulosic biomass conversion in an immobilized laccase microreactor system?. Bioresource Technology, 2023, 374, 128775.	4.8	6
163	Effect of pretreatment severity on the inhibitory behaviors of larch lignins in enzymatic hydrolysis. Industrial Crops and Products, 2023, 197, 116660.	2.5	5
164	Exploring how lignin structure influences the interaction between carbohydrate-binding module and lignin using AFM. International Journal of Biological Macromolecules, 2023, 232, 123313.	3.6	5

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165	Reduced nutrient release and greenhouse gas emissions of lignin-based coated urea by synergy of carbon black and polysiloxane. <i>International Journal of Biological Macromolecules</i> , 2023, 231, 123334.	3.6	13
166	Revealing key factors influencing enzymatic digestibility of hydrothermally pretreated poplar in comparison with corn stover. <i>Industrial Crops and Products</i> , 2023, 194, 116297.	2.5	6
167	Revealing adsorption of mixed enzymes onto lignin resulted from integration of hydrothermal and chemi-mechanical pretreatment. <i>Industrial Crops and Products</i> , 2023, 194, 116353.	2.5	4
168	Acidic deep eutectic solvent assisted mechanochemical delignification of lignocellulosic biomass at room temperature. <i>International Journal of Biological Macromolecules</i> , 2023, 234, 123593.	3.6	15
169	Understanding the Inhibition Mechanism of Lignin Adsorption to Cellulase in Terms of Changes in Composition and Conformation of Free Enzymes. <i>Sustainability</i> , 2023, 15, 6057.	1.6	2
170	Inactivation and process intensification of β -glucosidase in biomass utilization. <i>Applied Microbiology and Biotechnology</i> , 2023, 107, 3191-3204.	1.7	2