Yunqiao Pu

List of Publications by Year
in descending order

178 papers	12,837 citations	17319 63 h-index	28046 106 g-index
180 all docs	180 docs citations	180 times ranked	12343 citing authors

#	Article	IF	Citations
1	From lignin to valuable productsâ€"strategies, challenges, and prospects. Bioresource Technology, 2019, 271, 449-461.	9.7	620
2	Ionic Liquid as a Green Solvent for Lignin. Journal of Wood Chemistry and Technology, 2007, 27, 23-33.	1.8	491
3	Assessing the molecular structure basis for biomass recalcitrance during dilute acid and hydrothermal pretreatments. Biotechnology for Biofuels, 2013, 6, 15.	6.3	486
4	Application of quantitative 31P NMR in biomass lignin and biofuel precursors characterization. Energy and Environmental Science, 2011, 4, 3154.	32.2	459
5	The critical role of lignin in lignocellulosic biomass conversion and recent pretreatment strategies: A comprehensive review. Bioresource Technology, 2020, 301, 122784.	9.7	446
6	Current Understanding of the Correlation of Lignin Structure with Biomass Recalcitrance. Frontiers in Chemistry, 2016, 4, 45.	3.7	300
7	Observation of Potential Contaminants in Processed Biomass Using Fourier Transform Infrared Spectroscopy. Applied Sciences (Switzerland), 2020, 10, 4345.	2.6	276
8	Ionic liquids: Promising green solvents for lignocellulosic biomass utilization. Current Opinion in Green and Sustainable Chemistry, 2017, 5, 5-11.	6.3	258
9	Structural Characterization and Comparison of Switchgrass Ball-milled Lignin Before and After Dilute Acid Pretreatment. Applied Biochemistry and Biotechnology, 2010, 162, 62-74.	3.0	231
10	The new forestry biofuels sector. Biofuels, Bioproducts and Biorefining, 2008, 2, 58-73.	3.7	224
11	Investigation of lignin deposition on cellulose during hydrothermal pretreatment, its effect on cellulose hydrolysis, and underlying mechanisms. Biotechnology and Bioengineering, 2014, 111, 485-492.	3.5	224
12	A critical review on the analysis of lignin carbohydrate bonds. Green Chemistry, 2019, 21, 1573-1595.	9.4	222
13	High Shear Homogenization of Lignin to Nanolignin and Thermal Stability of Nanoligninâ€Polyvinyl Alcohol Blends. ChemSusChem, 2014, 7, 3513-3520.	7.5	212
14	Facile synthesis of spherical cellulose nanoparticles. Carbohydrate Polymers, 2007, 69, 607-611.	10.5	211
15	Synergistic enzymatic and microbial lignin conversion. Green Chemistry, 2016, 18, 1306-1312.	9.4	177
16	Cellulase kinetics as a function of cellulose pretreatment. Metabolic Engineering, 2008, 10, 370-381.	7.1	163
17	Effects of organosolv and ammonia pretreatments on lignin properties and its inhibition for enzymatic hydrolysis. Green Chemistry, 2017, 19, 2006-2016.	9.4	148
18	Chemical transformations of Populus trichocarpa during dilute acid pretreatment. RSC Advances, 2012, 2, 10925.	3.7	141

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19	Sugar release and growth of biofuel crops are improved by downregulation of pectin biosynthesis. Nature Biotechnology, 2018, 36, 249-257.	20.8	141
20	Cellulosic biorefineriesâ€"unleashing lignin opportunities. Current Opinion in Environmental Sustainability, 2010, 2, 383-393.	6.6	138
21	Structural Characterization of Switchgrass Lignin after Ethanol Organosolv Pretreatment. Energy & Fuels, 2012, 26, 740-745.	5.2	130
22	Critical review of FDM 3D printing of PLA biocomposites filled with biomass resources, characterization, biodegradability, upcycling and opportunities for biorefineries. Applied Materials Today, 2021, 24, 101078.	4.5	130
23	Systems biology-guided biodesign of consolidated lignin conversion. Green Chemistry, 2016, 18, 5536-5547.	9.4	127
24	Inhibitory effects of lignin on enzymatic hydrolysis: The role of lignin chemistry and molecular weight. Renewable Energy, 2018, 123, 664-674.	9.0	127
25	Synergistic maximization of the carbohydrate output and lignin processability by combinatorial pretreatment. Green Chemistry, 2017, 19, 4939-4955.	9.4	123
26	Enhanced characteristics of genetically modified switchgrass (Panicum virgatum L.) for high biofuel production. Biotechnology for Biofuels, 2013, 6, 71.	6.3	122
27	Chemical Transformations of Buddleja davidii Lignin during Ethanol Organosolv Pretreatment. Energy & Fuels, 2010, 24, 2723-2732.	5.2	118
28	An Inâ€Ðepth Understanding of Biomass Recalcitrance Using Natural Poplar Variants as the Feedstock. ChemSusChem, 2017, 10, 139-150.	7.5	116
29	Effects of the advanced organosolv pretreatment strategies on structural properties of woody biomass. Industrial Crops and Products, 2020, 146, 112144.	5.4	112
30	A Genomics Approach to Deciphering Lignin Biosynthesis in Switchgrass. Plant Cell, 2013, 25, 4342-4361.	6.7	111
31	Significance of Lignin S/G Ratio in Biomass Recalcitrance of <i>Populus trichocarpa</i> Variants for Bioethanol Production. ACS Sustainable Chemistry and Engineering, 2018, 6, 2162-2168.	6.9	110
32	Increase in 4-Coumaryl Alcohol Units during Lignification in Alfalfa (Medicago sativa) Alters the Extractability and Molecular Weight of Lignin. Journal of Biological Chemistry, 2010, 285, 38961-38968.	3.5	106
33	Structural characterization of alkaline hydrogen peroxide pretreated grasses exhibiting diverse lignin phenotypes. Biotechnology for Biofuels, 2012, 5, 38.	6.3	106
34	Defining lignin nanoparticle properties through tailored lignin reactivity by sequential organosolv fragmentation approach (SOFA). Green Chemistry, 2019, 21, 245-260.	9.4	104
35	Chemical Transformations of Poplar Lignin during Cosolvent Enhanced Lignocellulosic Fractionation Process. ACS Sustainable Chemistry and Engineering, 2018, 6, 8711-8718.	6.9	101
36	Biomass Characterization of Buddleja davidii: A Potential Feedstock for Biofuel Production. Journal of Agricultural and Food Chemistry, 2009, 57, 1275-1281.	5.3	99

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37	Down-regulation of the caffeic acid O-methyltransferase gene in switchgrass reveals a novel monolignol analog. Biotechnology for Biofuels, 2012, 5, 71.	6.3	98
38	Synthesis, Characterization, and Utilization of a Lignin-Based Adsorbent for Effective Removal of Azo Dye from Aqueous Solution. ACS Omega, 2020, 5, 2865-2877.	3.6	98
39	CP/MAS 13C NMR analysis of cellulase treated bleached softwood kraft pulp. Carbohydrate Research, 2006, 341, 591-597.	2.4	95
40	Effect of Ethanol Organosolv Pretreatment on Enzymatic Hydrolysis of <i>Buddleja davidii</i> Stem Biomass. Industrial & Engineering Chemistry Research, 2010, 49, 1467-1472.	3.8	93
41	The effect of liquid hot water pretreatment on the chemicalâ€"structural alteration and the reduced recalcitrance in poplar. Biotechnology for Biofuels, 2017, 10, 237.	6.3	93
42	Investigation of a Lignin-Based Deep Eutectic Solvent Using <i>p</i>-Hydroxybenzoic Acid for Efficient Woody Biomass Conversion. ACS Sustainable Chemistry and Engineering, 2020, 8, 12542-12553.	6.9	92
43	Effects of Lignin Structure on Hydrodeoxygenation Reactivity of Pine Wood Lignin to Valuable Chemicals. ACS Sustainable Chemistry and Engineering, 2017, 5, 1824-1830.	6.9	91
44	Insights of biomass recalcitrance in natural<i>Populus trichocarpa</i>variants for biomass conversion. Green Chemistry, 2017, 19, 5467-5478.	9.4	89
45	A study of poplar organosolv lignin after melt rheology treatment as carbon fiber precursors. Green Chemistry, 2016, 18, 5015-5024.	9.4	87
46	Defined tetra-allelic gene disruption of the 4-coumarate:coenzyme A ligase 1 (Pv4CL1) gene by CRISPR/Cas9 in switchgrass results in lignin reduction and improved sugar release. Biotechnology for Biofuels, 2017, 10, 284.	6.3	83
47	NMR Characterization of C3H and HCT Down-Regulated Alfalfa Lignin. Bioenergy Research, 2009, 2, 198-208.	3.8	82
48	Characterization of fractional cuts of co-solvent enhanced lignocellulosic fractionation lignin isolated by sequential precipitation. Bioresource Technology, 2019, 272, 202-208.	9.7	82
49	A biomass pretreatment using cellulose-derived solvent Cyrene. Green Chemistry, 2020, 22, 2862-2872.	9.4	82
50	The occurrence of tricin and its derivatives in plants. Green Chemistry, 2016, 18, 1439-1454.	9.4	81
51	Lignin Structural Alterations in Thermochemical Pretreatments with Limited Delignification. Bioenergy Research, 2015, 8, 992-1003.	3.8	77
52	Ligninâ€derived electrochemical energy materials and systems. Biofuels, Bioproducts and Biorefining, 2020, 14, 650-672.	3.7	77
53	A Multifunctional Cosolvent Pair Reveals Molecular Principles of Biomass Deconstruction. Journal of the American Chemical Society, 2019, 141, 12545-12557.	14.6	76
54	Physicochemical Structural Changes of Poplar and Switchgrass during Biomass Pretreatment and Enzymatic Hydrolysis. ACS Sustainable Chemistry and Engineering, 2016, 4, 4563-4572.	6.9	75

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55	Comparative study of lignin characteristics from wheat straw obtained by soda-AQ and kraft pretreatment and effect on the following enzymatic hydrolysis process. Bioresource Technology, 2016, 207, 361-369.	9.7	75
56	Investigation into nanocellulosics versus acacia reinforced acrylic films. Composites Part B: Engineering, 2007, 38, 360-366.	12.1	74
57	Characterization of products from hydrothermal carbonization of pine. Bioresource Technology, 2017, 244, 78-83.	9.7	74
58	Recent Advances in the Application of Functionalized Lignin in Value-Added Polymeric Materials. Polymers, 2020, 12, 2277.	4.6	73
59	Investigation of the fate of poplar lignin during autohydrolysis pretreatment to understand the biomass recalcitrance. RSC Advances, 2013, 3, 5305.	3.7	72
60	Characterization and Catalytic Transfer Hydrogenolysis of Deep Eutectic Solvent Extracted Sorghum Lignin to Phenolic Compounds. ACS Sustainable Chemistry and Engineering, 2018, 6, 10408-10420.	6.9	68
61	Fractionation and characterization of lignin streams from unique high-lignin content endocarp feedstocks. Biotechnology for Biofuels, 2018, 11, 304.	6.3	67
62	Assessing the Facile Pretreatments of Bagasse for Efficient Enzymatic Conversion and Their Impacts on Structural and Chemical Properties. ACS Sustainable Chemistry and Engineering, 2019, 7, 1095-1104.	6.9	67
63	Solid-state NMR characterization of switchgrass cellulose after dilute acid pretreatment. Biofuels, 2010, 1, 85-90.	2.5	65
64	Chemical compositions of four switchgrass populations. Biomass and Bioenergy, 2010, 34, 48-53.	5.9	64
65	Natural deep eutectic solvent mediated extrusion for continuous high-solid pretreatment of lignocellulosic biomass. Green Chemistry, 2020, 22, 6372-6383.	9.4	63
66	Perdeuterated pyridinium molten salt (ionic liquid) for direct dissolution and NMR analysis of plant cell walls. Green Chemistry, 2009, 11, 1762.	9.4	61
67	Effect of torrefaction temperature on lignin macromolecule and product distribution from HZSM-5 catalytic pyrolysis. Journal of Analytical and Applied Pyrolysis, 2016, 122, 95-105.	5.6	61
68	Structural changes of lignins in natural Populus variants during different pretreatments. Bioresource Technology, 2020, 295, 122240.	9.7	61
69	Elucidating Structural Characteristics of Biomass using Solutionâ€State 2â€‰D NMR with a Mixture of Deuterated Dimethylsulfoxide and Hexamethylphosphoramide. ChemSusChem, 2016, 9, 1090-1095.	7.5	60
70	The effect of lignin degradation products on the generation of pseudo-lignin during dilute acid pretreatment. Industrial Crops and Products, 2020, 146, 112205.	5.4	60
71	Poplar as Biofiber Reinforcement in Composites for Large-Scale 3D Printing. ACS Applied Bio Materials, 2019, 2, 4557-4570.	4.8	58
72	Preparation of aligned porous chitin nanowhisker foams by directional freezeâ€“casting technique. Carbohydrate Polymers, 2014, 112, 277-283.	10.5	57

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73	Understanding Lignin Fractionation and Characterization from Engineered Switchgrass Treated by an Aqueous Ionic Liquid. ACS Sustainable Chemistry and Engineering, 2018, 6, 6612-6623.	6.9	57
74	Comparison of microwaves to fluidized sand baths for heating tubular reactors for hydrothermal and dilute acid batch pretreatment of corn stover. Bioresource Technology, 2011, 102, 5952-5961.	9.7	56
75	Mechanismâ€Guided Design of Highly Efficient Protein Secretion and Lipid Conversion for Biomanufacturing and Biorefining. Advanced Science, 2019, 6, 1801980.	12.4	55
76	Challenges of the utilization of wood polymers: how can they be overcome?. Applied Microbiology and Biotechnology, 2011, 91, 1525-1536.	3.7	53
77	Insights of Ethanol Organosolv Pretreatment on Lignin Properties of <i>Broussonetia papyrifera</i>. ACS Sustainable Chemistry and Engineering, 2018, 6, 14767-14773.	6.9	52
78	Tensile properties of 3D-printed wood-filled PLA materials using poplar trees. Applied Materials Today, 2020, 21, 100832.	4.5	52
79	Comparison of changes in cellulose ultrastructure during different pretreatments of poplar. Cellulose, 2014, 21, 2419-2431.	5.1	50
80	Linking lignin source with structural and electrochemical properties of lignin-derived carbon materials. RSC Advances, 2018, 8, 38721-38732.	3.7	50
81	Transgenic Poplar Designed for Biofuels. Trends in Plant Science, 2020, 25, 881-896.	9.1	50
82	Adding tetrahydrofuran to dilute acid pretreatment provides new insights into substrate changes that greatly enhance biomass deconstruction by Clostridium thermocellum and fungal enzymes. Biotechnology for Biofuels, 2017, 10, 252.	6.3	46
83	Dynamic changes in transcriptome and cell wall composition underlying brassinosteroid-mediated lignification of switchgrass suspension cells. Biotechnology for Biofuels, 2017, 10, 266.	6.3	44
84	Structural characterization of sugarcane lignins extracted from different protic ionic liquid pretreatments. Renewable Energy, 2020, 161, 579-592.	9.0	44
85	Revealing the Molecular Structural Transformation of Hardwood and Softwood in Dilute Acid Flowthrough Pretreatment. ACS Sustainable Chemistry and Engineering, 2016, 4, 6618-6628.	6.9	40
86	Structural analysis of acetylated hardwood lignins and their photoyellowing properties. Canadian Journal of Chemistry, 2005, 83, 2132-2139.	1.1	39
87	Enhancing the multi-functional properties of renewable lignin carbon fibers <i>via</i> defining the structureâ€"property relationship using different biomass feedstocks. Green Chemistry, 2021, 23, 3725-3739.	9.4	39
88	Characteristics of Lignin Fractions from Dilute Acid Pretreated Switchgrass and Their Effect on Cellobiohydrolase from Trichoderma longibrachiatum. Frontiers in Energy Research, 2018, 6, .	2.3	38
89	Cellulolytic enzyme-aided extraction of hemicellulose from switchgrass and its characteristics. Green Chemistry, 2019, 21, 3902-3910.	9.4	38
90	Structural Transformation of Isolated Poplar and Switchgrass Lignins during Dilute Acid Treatment. ACS Sustainable Chemistry and Engineering, 2015, 3, 2203-2210.	6.9	37

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91	Functional Analysis of Cellulose Synthase CesA4 and CesA6 Genes in Switchgrass (Panicum virgatum) by Overexpression and RNAi-Mediated Gene Silencing. Frontiers in Plant Science, 2018, 9, 1114.	3.8	37
92	Compositional Characterization and Pyrolysis of Loblolly Pine and Douglas-fir Bark. Bioenergy Research, 2013, 6, 24-34.	3.8	35
93	A structured understanding of cellobiohydrolase I binding to poplar lignin fractions after dilute acid pretreatment. Biotechnology for Biofuels, 2018, 11, 96.	6.3	35
94	Downregulation of pectin biosynthesis gene GAUT4 leads to reduced ferulate and lignin-carbohydrate cross-linking in switchgrass. Communications Biology, 2019, 2, 22.	4.5	35
95	³¹P NMR Chemical Shifts of Solvents and Products Impurities in Biomass Pretreatments. ACS Sustainable Chemistry and Engineering, 2018, 6, 1265-1270.	6.9	34
96	Study of traits and recalcitrance reduction of field-grown COMT down-regulated switchgrass. Biotechnology for Biofuels, 2017, 10, 12.	6.3	32
97	PdWND3A, a wood-associated NAC domain-containing protein, affects lignin biosynthesis and composition in Populus. BMC Plant Biology, 2019, 19, 486.	3.7	32
98	Deconstruction of biomass enabled by local demixing of cosolvents at cellulose and lignin surfaces. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 16776-16781.	7.6	32
99	Pinoresinol reductase 1 impacts lignin distribution during secondary cell wall biosynthesis in Arabidopsis. Phytochemistry, 2015, 112, 170-178.	3.0	31
100	Emerging Strategies for Modifying Lignin Chemistry to Enhance Biological Lignin Valorization. ChemSusChem, 2020, 13, 5423-5432.	7.5	31
101	Overexpression of a serine hydroxymethyltransferase increases biomass production and reduces recalcitrance in the bioenergy crop <i>Populus</i>. Sustainable Energy and Fuels, 2019, 3, 195-207.	4.8	30
102	Production of xylo-oligosaccharides from poplar by acetic acid pretreatment and its impact on inhibitory effect of poplar lignin. Bioresource Technology, 2021, 323, 124593.	9.7	30
103	Porous artificial bone scaffold synthesized from a facile in situ hydroxyapatite coating and crosslinking reaction of crystalline nanocellulose. Materialia, 2018, 4, 237-246.	2.8	28
104	Rapid Determination of Lignin Content via Direct Dissolution and ¹Hâ€‰NMR Analysis of Plant Cell Walls. ChemSusChem, 2010, 3, 1285-1289.	7.5	27
105	Study on the modification of bleached eucalyptus kraft pulp using birch xylan. Carbohydrate Polymers, 2012, 88, 719-725.	10.5	27
106	Freeze-casting of cellulose nanowhisker foams prepared from a water-dimethylsulfoxide (DMSO) binary mixture at low DMSO concentrations. RSC Advances, 2013, 3, 19272.	3.7	27
107	Physiochemical Characterization of Lignocellulosic Biomass Dissolution by Flowthrough Pretreatment. ACS Sustainable Chemistry and Engineering, 2016, 4, 219-227.	6.9	27
108	Mechanistic Insight into Lignin Slow Pyrolysis by Linking Pyrolysis Chemistry and Carbon Material Properties. ACS Sustainable Chemistry and Engineering, 2020, 8, 15843-15854.	6.9	27

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109	Cross-Polarization/Magic Angle Spinning (CP/MAS) ¹³C Nuclear Magnetic Resonance (NMR) Analysis of Chars from Alkaline-Treated Pyrolyzed Softwood. Energy & Fuels, 2009, 23, 498-501.	5.2	26
110	Biodiesel from grease interceptor to gas tank. Energy Science and Engineering, 2013, 1, 42-52.	3.9	26
111	Adsorption of cellobiohydrolases I onto lignin fractions from dilute acid pretreated Broussonetia papyrifera. Bioresource Technology, 2017, 244, 957-962.	9.7	26
112	The effect of switchgrass plant cell wall properties on its deconstruction by thermochemical pretreatments coupled with fungal enzymatic hydrolysis or<i>Clostridium thermocellum</i>consolidated bioprocessing. Green Chemistry, 2020, 22, 7924-7945.	9.4	26
113	Plant Biomass Characterization: Application of Solutionâ€•and Solidâ€State NMR Spectroscopy. , 2013, , 369-390.		25
114	19F NMR spectroscopy for the quantitative analysis of carbonyl groups in bio-oils. RSC Advances, 2014, 4, 17743.	3.7	24
115	Hemicellulose characterization of deuterated switchgrass. Bioresource Technology, 2018, 269, 567-570.	9.7	24
116	Structural Characterization of Lignin in Wild-Type versus COMT Down-Regulated Switchgrass. Frontiers in Energy Research, 2014, 1, .	2.3	23
117	The Nature of Hololignin. ACS Sustainable Chemistry and Engineering, 2018, 6, 957-964.	6.9	23
118	Hemicelluloseâ€"Cellulose Composites Reveal Differences in Cellulose Organization after Dilute Acid Pretreatment. Biomacromolecules, 2019, 20, 893-903.	5.6	23
119	THF co-solvent pretreatment prevents lignin redeposition from interfering with enzymes yielding prolonged cellulase activity. Biotechnology for Biofuels, 2021, 14, 63.	6.3	23
120	A Novel Oxidative Pretreatment of Loblolly Pine, Sweetgum, and Miscanthus by Ozone. Journal of Wood Chemistry and Technology, 2012, 32, 361-375.	1.8	22
121	Overexpression of a Domain of Unknown Function 266-containing protein results in high cellulose content, reduced recalcitrance, and enhanced plant growth in the bioenergy crop Populus. Biotechnology for Biofuels, 2017, 10, 74.	6.3	22
122	Nonâ€Solvent Fractionation of Lignin Enhances Carbon Fiber Performance. ChemSusChem, 2019, 12, 3249-3256.	7.5	22
123	Double bonus: surfactant-assisted biomass pelleting benefits both the pelleting process and subsequent enzymatic saccharification of the pretreated pellets. Green Chemistry, 2021, 23, 1050-1061.	9.4	22
124	Elucidating the mechanisms of enhanced lignin bioconversion by an alkali sterilization strategy. Green Chemistry, 2021, 23, 4697-4709.	9.4	21
125	Comparative evaluation of Populus variants total sugar release and structural features following pretreatment and digestion by two distinct biological systems. Biotechnology for Biofuels, 2017, 10, 292.	6.3	20
126	Understanding the influences of different pretreatments on recalcitrance of Populus natural variants. Bioresource Technology, 2018, 265, 75-81.	9.7	20

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127	Synthesis and Characterization of Lignin-grafted-poly(Îµ-caprolactone) from Different Biomass Sources. New Biotechnology, 2021, 60, 189-199.	4.6	20
128	Arabidopsis Câ€‐terminal binding protein ANGUSTIFOLIA modulates transcriptional coâ€‐regulation of <i>MYB46</i> and <i>WRKY33</i>. New Phytologist, 2020, 228, 1627-1639.	7.8	19
129	Targeting hydroxycinnamoyl CoA: shikimate hydroxycinnamoyl transferase for lignin modification in Brachypodium distachyon. Biotechnology for Biofuels, 2021, 14, 50.	6.3	19
130	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.	5.4	19
131	Combining loss of function of FOLYLPOLYGLUTAMATE SYNTHETASE1 and CAFFEOYL-COA 3-O-METHYLTRANSFERASE1 for lignin reduction and improved saccharification efficiency in Arabidopsis thaliana. Biotechnology for Biofuels, 2019, 12, 108.	6.3	18
132	Recycled Cardboard Containers as a Low Energy Source for Cellulose Nanofibrils and Their Use in Poly(<scp>l</scp>-lactide) Nanocomposites. ACS Sustainable Chemistry and Engineering, 2021, 9, 13460-13470.	6.9	18
133	Effects of different pelleting technologies and parameters on pretreatment and enzymatic saccharification of lignocellulosic biomass. Renewable Energy, 2021, 179, 2147-2157.	9.0	18
134	Investigation of the photo-oxidative chemistry of acetylated softwood lignin. Journal of Photochemistry and Photobiology A: Chemistry, 2004, 163, 215-221.	4.0	17
135	A Novel Method for Enhanced Recovery of Lignin from Aqueous Process Streams. Journal of Wood Chemistry and Technology, 2007, 27, 219-224.	1.8	17
136	Near-Infrared Spectroscopy and Chemometric Analysis for Determining Oxygen Delignification Yield. Journal of Wood Chemistry and Technology, 2008, 28, 122-136.	1.8	17
137	Vibrational spectral signatures of crystalline cellulose using high resolution broadband sum frequency generation vibrational spectroscopy (HR-BB-SFG-VS). Cellulose, 2015, 22, 1469-1484.	5.1	17
138	Overexpression of a <i>Prefoldin Î²</i> subunit gene reduces biomass recalcitrance in the bioenergy crop <i>Populus</i>. Plant Biotechnology Journal, 2020, 18, 859-871.	8.5	17
139	Cosolvent enhanced lignocellulosic fractionation tailoring lignin chemistry and enhancing lignin bioconversion. Bioresource Technology, 2022, 347, 126367.	9.7	17
140	Effects of CELF Pretreatment Severity on Lignin Structure and the Lignin-Based Polyurethane Properties. Frontiers in Energy Research, 2020, 8, .	2.3	16
141	Elucidating carboxylic acid profiles for extended oxygen delignification of high-kappa softwood kraft pulps. Holzforschung, 2006, 60, 123-129.	2.0	15
142	Lignocellulosic fiber charge enhancement by catalytic oxidation during oxygen delignification. Journal of Colloid and Interface Science, 2007, 306, 248-254.	9.6	15
143	Physical and chemical differences between one-stage and two-stage hydrothermal pretreated hardwood substrates for use in cellulosic ethanol production. Biotechnology for Biofuels, 2016, 9, 30.	6.3	15
144	Enhancing Enzyme-Mediated Hydrolysis of Mechanical Pulps by Deacetylation and Delignification. ACS Sustainable Chemistry and Engineering, 2020, 8, 5847-5855.	6.9	15

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145	Opportunities and challenges for flow-through hydrothermal pretreatment in advanced biorefineries. Bioresource Technology, 2022, 343, 126061.	9.7	15
146	Bioenergy Underground: Challenges and opportunities for phenotyping roots and the microbiome for sustainable bioenergy crop production. The Plant Phenome Journal, 2022, 5, .	2.2	15
147	Chemical and Morphological Structure of Transgenic Switchgrass Organosolv Lignin Extracted by Ethanol, Tetrahydrofuran, and Î³-Valerolactone Pretreatments. ACS Sustainable Chemistry and Engineering, 2022, 10, 9041-9052.	6.9	15
148	Hydrodeoxygenation by deuterium gas â€" a powerful way to provide insight into the reaction mechanisms. Physical Chemistry Chemical Physics, 2013, 15, 19138.	2.9	14
149	Preparation and characteristics of cellulose nanowhisker reinforced acrylic foams synthesized by freeze-casting. RSC Advances, 2014, 4, 12148.	3.7	14
150	³¹Pâ€‰NMR Characterization of Tricin and Its Structurally Similar Flavonoids. ChemistrySelect, 2017, 2, 3557-3561.	1.6	14
151	Characterization of Whole Biomasses in Pyridine Based Ionic Liquid at Low Temperature by 31P NMR: An Approach to Quantitatively Measure Hydroxyl Groups in Biomass As Their Original Structures. Frontiers in Energy Research, 2018, 6, .	2.3	14
152	Valorization of homogeneous linear catechyl lignin: opportunities and challenges. RSC Advances, 2023, 13, 12750-12759.	3.7	12
153	Effect of in Vivo Deuteration on Structure of Switchgrass Lignin. ACS Sustainable Chemistry and Engineering, 2017, 5, 8004-8010.	6.9	11
154	Cellulose hydrolysis by<i>Clostridium thermocellum</i>is agnostic to substrate structural properties in contrast to fungal cellulases. Green Chemistry, 2019, 21, 2810-2822.	9.4	11
155	Engineered Sorghum Bagasse Enables a Sustainable Biorefinery with <i>p</i>â€Hydroxybenzoic Acidâ€Based Deep Eutectic Solvent. ChemSusChem, 2021, 14, 5235-5244.	7.5	11
156	Molecular Engineering of Biorefining Lignin Waste for Solid-State Electrolyte. ACS Sustainable Chemistry and Engineering, 2022, 10, 8704-8714.	6.9	10
157	An integrated biorefinery approach to obtain xylo-oligosaccharides from corncob using lactic acid-rich fermentation broth. Journal of Cleaner Production, 2023, 397, 136513.	9.5	10
158	Changes in Cell Wall Properties Coincide with Overexpression of Extensin Fusion Proteins in Suspension Cultured Tobacco Cells. PLoS ONE, 2014, 9, e115906.	2.5	9
159	Strikingly high amount of tricin-lignin observed from vanilla (<i>Vanilla planifolia</i>) aerial roots. Green Chemistry, 2022, 24, 259-270.	9.4	9
160	The use of combination of zeolites to pursue integrated refined pyrolysis oil from kraft lignin. Sustainable Chemical Processes, 2014, 2, .	2.6	8
161	The physiochemical alteration of flax fibers structuring components after different scouring and bleaching treatments. Industrial Crops and Products, 2021, 160, 113112.	5.4	8
162	Degradation of aromatic compounds and lignin by marine protist Thraustochytrium striatum. Process Biochemistry, 2021, 107, 13-17.	3.8	8

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163	Effect of Protic Ionic Liquids in Sugar Cane Bagasse Pretreatment for Lignin Valorization and Ethanol Production. ACS Sustainable Chemistry and Engineering, 2021, 9, 16965-16976.	6.9	8
164	Simultaneous depolymerization and fermentation of lignin into value-added products by the marine protist, Thraustochytrium striatum. Algal Research, 2020, 46, 101773.	4.7	7
165	Influence of chain length in protic ionic liquids on physicochemical and structural features of lignins from sugarcane bagasse. Industrial Crops and Products, 2021, 159, 113080.	5.4	7
166	Black Liquor Valorization by Using Marine Protist <i>Thraustochytrium striatum</i> and the Preliminary Metabolic Mechanism Study. ACS Sustainable Chemistry and Engineering, 2020, 8, 1786-1796.	6.9	6
167	Hydrogen bondâ€"induced aqueous-phase surface modification of nanocellulose and its mechanically strong composites. Journal of Materials Science, 2022, 57, 8127-8138.	3.7	6
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