Yunqiao Pu

List of Publications by Year
in descending order

173 papers	12,260 citations	18436 62 h-index	29081 104 g-index
175 all docs	175 docs citations	175 times ranked	9979 citing authors

#	Article	IF	Citations
1	From lignin to valuable productsâ€“strategies, challenges, and prospects. Bioresource Technology, 2019, 271, 449-461.	4.8	565
2	Ionic Liquid as a Green Solvent for Lignin. Journal of Wood Chemistry and Technology, 2007, 27, 23-33.	0.9	484
3	Assessing the molecular structure basis for biomass recalcitrance during dilute acid and hydrothermal pretreatments. Biotechnology for Biofuels, 2013, 6, 15.	6.2	468
4	Application of quantitative 31P NMR in biomass lignin and biofuel precursors characterization. Energy and Environmental Science, 2011, 4, 3154.	15.6	447
5	The critical role of lignin in lignocellulosic biomass conversion and recent pretreatment strategies: A comprehensive review. Bioresource Technology, 2020, 301, 122784.	4.8	396
6	Current Understanding of the Correlation of Lignin Structure with Biomass Recalcitrance. Frontiers in Chemistry, 2016, 4, 45.	1.8	279
7	Determination of hydroxyl groups in biorefinery resources via quantitative 31P NMR spectroscopy. Nature Protocols, 2019, 14, 2627-2647.	5.5	272
8	Observation of Potential Contaminants in Processed Biomass Using Fourier Transform Infrared Spectroscopy. Applied Sciences (Switzerland), 2020, 10, 4345.	1.3	249
9	Ionic liquids: Promising green solvents for lignocellulosic biomass utilization. Current Opinion in Green and Sustainable Chemistry, 2017, 5, 5-11.	3.2	238
10	Structural Characterization and Comparison of Switchgrass Ball-milled Lignin Before and After Dilute Acid Pretreatment. Applied Biochemistry and Biotechnology, 2010, 162, 62-74.	1.4	227
11	The new forestry biofuels sector. Biofuels, Bioproducts and Biorefining, 2008, 2, 58-73.	1.9	219
12	Investigation of lignin deposition on cellulose during hydrothermal pretreatment, its effect on cellulose hydrolysis, and underlying mechanisms. Biotechnology and Bioengineering, 2014, 111, 485-492.	1.7	214
13	Facile synthesis of spherical cellulose nanoparticles. Carbohydrate Polymers, 2007, 69, 607-611.	5.1	208
14	A critical review on the analysis of lignin carbohydrate bonds. Green Chemistry, 2019, 21, 1573-1595.	4.6	204
15	High Shear Homogenization of Lignin to Nanolignin and Thermal Stability of Nanoligninâ€Polyvinyl Alcohol Blends. ChemSusChem, 2014, 7, 3513-3520.	3.6	199
16	Synergistic enzymatic and microbial lignin conversion. Green Chemistry, 2016, 18, 1306-1312.	4.6	172
17	Cellulase kinetics as a function of cellulose pretreatment. Metabolic Engineering, 2008, 10, 370-381.	3.6	157
18	Effects of organosolv and ammonia pretreatments on lignin properties and its inhibition for enzymatic hydrolysis. Green Chemistry, 2017, 19, 2006-2016.	4.6	145

#	Article	IF	Citations
19	Chemical transformations of Populus trichocarpa during dilute acid pretreatment. RSC Advances, 2012, 2, 10925.	1.7	138
20	Sugar release and growth of biofuel crops are improved by downregulation of pectin biosynthesis. Nature Biotechnology, 2018, 36, 249-257.	9.4	136
21	Cellulosic biorefineriesâ€"unleashing lignin opportunities. Current Opinion in Environmental Sustainability, 2010, 2, 383-393.	3.1	134
22	Structural Characterization of Switchgrass Lignin after Ethanol Organosolv Pretreatment. Energy & Fuels, 2012, 26, 740-745.	2.5	127
23	Inhibitory effects of lignin on enzymatic hydrolysis: The role of lignin chemistry and molecular weight. Renewable Energy, 2018, 123, 664-674.	4.3	121
24	Systems biology-guided biodesign of consolidated lignin conversion. Green Chemistry, 2016, 18, 5536-5547.	4.6	119
25	Enhanced characteristics of genetically modified switchgrass (Panicum virgatum L.) for high biofuel production. Biotechnology for Biofuels, 2013, 6, 71.	6.2	118
26	Chemical Transformations of Buddleja davidii Lignin during Ethanol Organosolv Pretreatment. Energy & Fuels, 2010, 24, 2723-2732.	2.5	116
27	Synergistic maximization of the carbohydrate output and lignin processability by combinatorial pretreatment. Green Chemistry, 2017, 19, 4939-4955.	4.6	116
28	Effect of torrefaction on biomass structure and hydrocarbon production from fast pyrolysis. Green Chemistry, 2015, 17, 2406-2417.	4.6	112
29	A Genomics Approach to Deciphering Lignin Biosynthesis in Switchgrass. Plant Cell, 2013, 25, 4342-4361.	3.1	109
30	Structural characterization of alkaline hydrogen peroxide pretreated grasses exhibiting diverse lignin phenotypes. Biotechnology for Biofuels, 2012, 5, 38.	6.2	106
31	An Inâ€Depth Understanding of Biomass Recalcitrance Using Natural Poplar Variants as the Feedstock. ChemSusChem, 2017, 10, 139-150.	3.6	106
32	Effects of the advanced organosolv pretreatment strategies on structural properties of woody biomass. Industrial Crops and Products, 2020, 146, 112144.	2.5	103
33	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.	1.6	102
34	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.	3.2	100
35	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.	2.3	100
36	Chemical Transformations of Poplar Lignin during Cosolvent Enhanced Lignocellulosic Fractionation Process. ACS Sustainable Chemistry and Engineering, 2018, 6, 8711-8718.	3.2	99

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37	Biomass Characterization of Buddleja davidii: A Potential Feedstock for Biofuel Production. Journal of Agricultural and Food Chemistry, 2009, 57, 1275-1281.	2.4	97
38	Defining lignin nanoparticle properties through tailored lignin reactivity by sequential organosolv fragmentation approach (SOFA). Green Chemistry, 2019, 21, 245-260.	4.6	97
39	Down-regulation of the caffeic acid O-methyltransferase gene in switchgrass reveals a novel monolignol analog. Biotechnology for Biofuels, 2012, 5, 71.	6.2	96
40	CP/MAS 13C NMR analysis of cellulase treated bleached softwood kraft pulp. Carbohydrate Research, 2006, 341, 591-597.	1.1	94
41	Synthesis, Characterization, and Utilization of a Lignin-Based Adsorbent for Effective Removal of Azo Dye from Aqueous Solution. ACS Omega, 2020, 5, 2865-2877.	1.6	91
42	Effect of Ethanol Organosolv Pretreatment on Enzymatic Hydrolysis of <i>Buddleja davidii</i> Stem Biomass. Industrial & Engineering Chemistry Research, 2010, 49, 1467-1472.	1.8	90
43	Effects of Lignin Structure on Hydrodeoxygenation Reactivity of Pine Wood Lignin to Valuable Chemicals. ACS Sustainable Chemistry and Engineering, 2017, 5, 1824-1830.	3.2	90
44	The effect of liquid hot water pretreatment on the chemicalâ€“structural alteration and the reduced recalcitrance in poplar. Biotechnology for Biofuels, 2017, 10, 237.	6.2	88
45	A study of poplar organosolv lignin after melt rheology treatment as carbon fiber precursors. Green Chemistry, 2016, 18, 5015-5024.	4.6	85
46	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.	3.2	83
47	NMR Characterization of C3H and HCT Down-Regulated Alfalfa Lignin. Bioenergy Research, 2009, 2, 198-208.	2.2	82
48	Insights of biomass recalcitrance in natural <i>Populus trichocarpa</i> variants for biomass conversion. Green Chemistry, 2017, 19, 5467-5478.	4.6	82
49	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.	6.2	80
50	Characterization of fractional cuts of co-solvent enhanced lignocellulosic fractionation lignin isolated by sequential precipitation. Bioresource Technology, 2019, 272, 202-208.	4.8	80
51	The occurrence of tricin and its derivatives in plants. Green Chemistry, 2016, 18, 1439-1454.	4.6	77
52	A biomass pretreatment using cellulose-derived solvent Cyrene. Green Chemistry, 2020, 22, 2862-2872.	4.6	77
53	Advanced Chemical Design for Efficient Lignin Bioconversion. ACS Sustainable Chemistry and Engineering, 2017, 5, 2215-2223.	3.2	75
54	Investigation into nanocellulosics versus acacia reinforced acrylic films. Composites Part B: Engineering, 2007, 38, 360-366.	5.9	73

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55	Physicochemical Structural Changes of Poplar and Switchgrass during Biomass Pretreatment and Enzymatic Hydrolysis. ACS Sustainable Chemistry and Engineering, 2016, 4, 4563-4572.	3.2	73
56	A Multifunctional Cosolvent Pair Reveals Molecular Principles of Biomass Deconstruction. Journal of the American Chemical Society, 2019, 141, 12545-12557.	6.6	73
57	Ligninâ€derived electrochemical energy materials and systems. Biofuels, Bioproducts and Biorefining, 2020, 14, 650-672.	1.9	73
58	Investigation of the fate of poplar lignin during autohydrolysis pretreatment to understand the biomass recalcitrance. RSC Advances, 2013, 3, 5305.	1.7	72
59	Characterization of products from hydrothermal carbonization of pine. Bioresource Technology, 2017, 244, 78-83.	4.8	72
60	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.	4.8	71
61	Lignin Structural Alterations in Thermochemical Pretreatments with Limited Delignification. Bioenergy Research, 2015, 8, 992-1003.	2.2	69
62	Solid-state NMR characterization of switchgrass cellulose after dilute acid pretreatment. Biofuels, 2010, 1, 85-90.	1.4	65
63	Recent Advances in the Application of Functionalized Lignin in Value-Added Polymeric Materials. Polymers, 2020, 12, 2277.	2.0	65
64	Chemical compositions of four switchgrass populations. Biomass and Bioenergy, 2010, 34, 48-53.	2.9	63
65	Fractionation and characterization of lignin streams from unique high-lignin content endocarp feedstocks. Biotechnology for Biofuels, 2018, 11, 304.	6.2	63
66	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.	3.2	63
67	Characterization and Catalytic Transfer Hydrogenolysis of Deep Eutectic Solvent Extracted Sorghum Lignin to Phenolic Compounds. ACS Sustainable Chemistry and Engineering, 2018, 6, 10408-10420.	3.2	62
68	Structural changes of lignins in natural Populus variants during different pretreatments. Bioresource Technology, 2020, 295, 122240.	4.8	61
69	Perdeuterated pyridinium molten salt (ionic liquid) for direct dissolution and NMR analysis of plant cell walls. Green Chemistry, 2009, 11, 1762.	4.6	60
70	Elucidating Structural Characteristics of Biomass using Solutionâ€State 2â€‰D NMR with a Mixture of Deuterated Dimethylsulfoxide and Hexamethylphosphoramide. ChemSusChem, 2016, 9, 1090-1095.	3.6	59
71	Natural deep eutectic solvent mediated extrusion for continuous high-solid pretreatment of lignocellulosic biomass. Green Chemistry, 2020, 22, 6372-6383.	4.6	58
72	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.	2.6	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.	3.2	56
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.	4.8	54
75	Preparation of aligned porous chitin nanowhisker foams by directional freezeâ€"casting technique. Carbohydrate Polymers, 2014, 112, 277-283.	5.1	53
76	Challenges of the utilization of wood polymers: how can they be overcome?. Applied Microbiology and Biotechnology, 2011, 91, 1525-1536.	1.7	52
77	Poplar as Biofiber Reinforcement in Composites for Large-Scale 3D Printing. ACS Applied Bio Materials, 2019, 2, 4557-4570.	2.3	52
78	Mechanismâ€Guided Design of Highly Efficient Protein Secretion and Lipid Conversion for Biomanufacturing and Biorefining. Advanced Science, 2019, 6, 1801980.	5.6	51
79	Insights of Ethanol Organosolv Pretreatment on Lignin Properties of <i>Broussonetia papyrifera</i>. ACS Sustainable Chemistry and Engineering, 2018, 6, 14767-14773.	3.2	49
80	The effect of lignin degradation products on the generation of pseudo-lignin during dilute acid pretreatment. Industrial Crops and Products, 2020, 146, 112205.	2.5	49
81	Comparison of changes in cellulose ultrastructure during different pretreatments of poplar. Cellulose, 2014, 21, 2419-2431.	2.4	47
82	Transgenic Poplar Designed for Biofuels. Trends in Plant Science, 2020, 25, 881-896.	4.3	45
83	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.	6.2	43
84	Tensile properties of 3D-printed wood-filled PLA materials using poplar trees. Applied Materials Today, 2020, 21, 100832.	2.3	43
85	Dynamic changes in transcriptome and cell wall composition underlying brassinosteroid-mediated lignification of switchgrass suspension cells. Biotechnology for Biofuels, 2017, 10, 266.	6.2	42
86	Linking lignin source with structural and electrochemical properties of lignin-derived carbon materials. RSC Advances, 2018, 8, 38721-38732.	1.7	42
87	Structural characterization of sugarcane lignins extracted from different protic ionic liquid pretreatments. Renewable Energy, 2020, 161, 579-592.	4.3	42
88	Structural analysis of acetylated hardwood lignins and their photoyellowing properties. Canadian Journal of Chemistry, 2005, 83, 2132-2139.	0.6	39
89	Revealing the Molecular Structural Transformation of Hardwood and Softwood in Dilute Acid Flowthrough Pretreatment. ACS Sustainable Chemistry and Engineering, 2016, 4, 6618-6628.	3.2	38
90	Characteristics of Lignin Fractions from Dilute Acid Pretreated Switchgrass and Their Effect on Cellobiohydrolase from Trichoderma longibrachiatum. Frontiers in Energy Research, 2018, 6, .	1.2	36

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91	Structural Transformation of Isolated Poplar and Switchgrass Lignins during Dilute Acid Treatment. ACS Sustainable Chemistry and Engineering, 2015, 3, 2203-2210.	3.2	35
92	Downregulation of pectin biosynthesis gene GAUT4 leads to reduced ferulate and lignin-carbohydrate cross-linking in switchgrass. Communications Biology, 2019, 2, 22.	2.0	35
93	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.	1.7	34
94	Cellulolytic enzyme-aided extraction of hemicellulose from switchgrass and its characteristics. Green Chemistry, 2019, 21, 3902-3910.	4.6	34
95	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.	4.6	33
96	Compositional Characterization and Pyrolysis of Loblolly Pine and Douglas-fir Bark. Bioenergy Research, 2013, 6, 24-34.	2.2	32
97	³¹P NMR Chemical Shifts of Solvents and Products Impurities in Biomass Pretreatments. ACS Sustainable Chemistry and Engineering, 2018, 6, 1265-1270.	3.2	32
98	Pinoresinol reductase 1 impacts lignin distribution during secondary cell wall biosynthesis in Arabidopsis. Phytochemistry, 2015, 112, 170-178.	1.4	31
99	Study of traits and recalcitrance reduction of field-grown COMT down-regulated switchgrass. Biotechnology for Biofuels, 2017, 10, 12.	6.2	30
100	A structured understanding of cellobiohydrolase I binding to poplar lignin fractions after dilute acid pretreatment. Biotechnology for Biofuels, 2018, 11, 96.	6.2	29
101	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.	3.3	29
102	PdWND3A, a wood-associated NAC domain-containing protein, affects lignin biosynthesis and composition in Populus. BMC Plant Biology, 2019, 19, 486.	1.6	28
103	Emerging Strategies for Modifying Lignin Chemistry to Enhance Biological Lignin Valorization. ChemSusChem, 2020, 13, 5423-5432.	3.6	28
104	Study on the modification of bleached eucalyptus kraft pulp using birch xylan. Carbohydrate Polymers, 2012, 88, 719-725.	5.1	27
105	Porous artificial bone scaffold synthesized from a facile in situ hydroxyapatite coating and crosslinking reaction of crystalline nanocellulose. Materialia, 2018, 4, 237-246.	1.3	27
106	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.	2.5	27
107	Production of xylo-oligosaccharides from poplar by acetic acid pretreatment and its impact on inhibitory effect of poplar lignin. Bioresource Technology, 2021, 323, 124593.	4.8	27
108	Rapid Determination of Lignin Content via Direct Dissolution and ¹Hâ€‰NMR Analysis of Plant Cell Walls. ChemSusChem, 2010, 3, 1285-1289.	3.6	26

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109	Freeze-casting of cellulose nanowhisker foams prepared from a water-dimethylsulfoxide (DMSO) binary mixture at low DMSO concentrations. RSC Advances, 2013, 3, 19272.	1.7	26
110	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.	2.5	25
111	Biodiesel from grease interceptor to gas tank. Energy Science and Engineering, 2013, 1, 42-52.	1.9	25
112	Physiochemical Characterization of Lignocellulosic Biomass Dissolution by Flowthrough Pretreatment. ACS Sustainable Chemistry and Engineering, 2016, 4, 219-227.	3.2	25
113	Adsorption of cellobiohydrolases I onto lignin fractions from dilute acid pretreated Broussonetia papyrifera. Bioresource Technology, 2017, 244, 957-962.	4.8	25
114	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.	4.6	25
115	19F NMR spectroscopy for the quantitative analysis of carbonyl groups in bio-oils. RSC Advances, 2014, 4, 17743.	1.7	24
116	The Nature of Hololignin. ACS Sustainable Chemistry and Engineering, 2018, 6, 957-964.	3.2	23
117	A Novel Oxidative Pretreatment of Loblolly Pine, Sweetgum, and Miscanthus by Ozone. Journal of Wood Chemistry and Technology, 2012, 32, 361-375.	0.9	22
118	Structural Characterization of Lignin in Wild-Type versus COMT Down-Regulated Switchgrass. Frontiers in Energy Research, 2014, 1, .	1.2	22
119	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.	6.2	22
120	Mechanistic Insight into Lignin Slow Pyrolysis by Linking Pyrolysis Chemistry and Carbon Material Properties. ACS Sustainable Chemistry and Engineering, 2020, 8, 15843-15854.	3.2	22
121	Hemicelluloseâ€"Cellulose Composites Reveal Differences in Cellulose Organization after Dilute Acid Pretreatment. Biomacromolecules, 2019, 20, 893-903.	2.6	21
122	THF co-solvent pretreatment prevents lignin redeposition from interfering with enzymes yielding prolonged cellulase activity. Biotechnology for Biofuels, 2021, 14, 63.	6.2	21
123	Understanding the influences of different pretreatments on recalcitrance of Populus natural variants. Bioresource Technology, 2018, 265, 75-81.	4.8	20
124	Hemicellulose characterization of deuterated switchgrass. Bioresource Technology, 2018, 269, 567-570.	4.8	20
125	Nonâ€Solvent Fractionation of Lignin Enhances Carbon Fiber Performance. ChemSusChem, 2019, 12, 3249-3256.	3.6	20
126	Elucidating the mechanisms of enhanced lignin bioconversion by an alkali sterilization strategy. Green Chemistry, 2021, 23, 4697-4709.	4.6	20

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127	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.	6.2	19
128	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.	6.2	18
129	Synthesis and Characterization of Lignin-grafted-poly(Îµ-caprolactone) from Different Biomass Sources. New Biotechnology, 2021, 60, 189-199.	2.4	18
130	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.	4.6	18
131	Investigation of the photo-oxidative chemistry of acetylated softwood lignin. Journal of Photochemistry and Photobiology A: Chemistry, 2004, 163, 215-221.	2.0	17
132	A Novel Method for Enhanced Recovery of Lignin from Aqueous Process Streams. Journal of Wood Chemistry and Technology, 2007, 27, 219-224.	0.9	17
133	Vibrational spectral signatures of crystalline cellulose using high resolution broadband sum frequency generation vibrational spectroscopy (HR-BB-SFG-VS). Cellulose, 2015, 22, 1469-1484.	2.4	17
134	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.	4.1	17
135	Arabidopsis Câ€terminal binding protein ANGUSTIFOLIA modulates transcriptional coâ€regulation of <i>MYB46</i> and <i>WRKY33</i>. New Phytologist, 2020, 228, 1627-1639.	3.5	17
136	Targeting hydroxycinnamoyl CoA: shikimate hydroxycinnamoyl transferase for lignin modification in Brachypodium distachyon. Biotechnology for Biofuels, 2021, 14, 50.	6.2	17
137	Near-Infrared Spectroscopy and Chemometric Analysis for Determining Oxygen Delignification Yield. Journal of Wood Chemistry and Technology, 2008, 28, 122-136.	0.9	16
138	Effects of CELF Pretreatment Severity on Lignin Structure and the Lignin-Based Polyurethane Properties. Frontiers in Energy Research, 2020, 8, .	1.2	16
139	Elucidating carboxylic acid profiles for extended oxygen delignification of high-kappa softwood kraft pulps. Holzforschung, 2006, 60, 123-129.	0.9	15
140	Lignocellulosic fiber charge enhancement by catalytic oxidation during oxygen delignification. Journal of Colloid and Interface Science, 2007, 306, 248-254.	5.0	15
141	Effects of different pelleting technologies and parameters on pretreatment and enzymatic saccharification of lignocellulosic biomass. Renewable Energy, 2021, 179, 2147-2157.	4.3	15
142	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
143	Preparation and characteristics of cellulose nanowhisker reinforced acrylic foams synthesized by freeze-casting. RSC Advances, 2014, 4, 12148.	1.7	14
144	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.	6.2	14

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145	³¹Pâ€‰NMR Characterization of Tricin and Its Structurally Similar Flavonoids. ChemistrySelect, 2017, 2, 3557-3561.	0.7	14
146	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, .	1.2	14
147	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.	3.2	14
148	Opportunities and challenges for flow-through hydrothermal pretreatment in advanced biorefineries. Bioresource Technology, 2022, 343, 126061.	4.8	14
149	Cosolvent enhanced lignocellulosic fractionation tailoring lignin chemistry and enhancing lignin bioconversion. Bioresource Technology, 2022, 347, 126367.	4.8	14
150	Hydrodeoxygenation by deuterium gas â€“ a powerful way to provide insight into the reaction mechanisms. Physical Chemistry Chemical Physics, 2013, 15, 19138.	1.3	13
151	Enhancing Enzyme-Mediated Hydrolysis of Mechanical Pulps by Deacetylation and Delignification. ACS Sustainable Chemistry and Engineering, 2020, 8, 5847-5855.	3.2	13
152	Effect of in Vivo Deuteration on Structure of Switchgrass Lignin. ACS Sustainable Chemistry and Engineering, 2017, 5, 8004-8010.	3.2	11
153	Cellulose hydrolysis by<i>Clostridium thermocellum</i>is agnostic to substrate structural properties in contrast to fungal cellulases. Green Chemistry, 2019, 21, 2810-2822.	4.6	10
154	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.	3.2	10
155	Engineered Sorghum Bagasse Enables a Sustainable Biorefinery with <i>p</i>â€Hydroxybenzoic Acidâ€Based Deep Eutectic Solvent. ChemSusChem, 2021, 14, 5235-5244.	3.6	9
156	Changes in Cell Wall Properties Coincide with Overexpression of Extensin Fusion Proteins in Suspension Cultured Tobacco Cells. PLoS ONE, 2014, 9, e115906.	1.1	9
157	Bioenergy Underground: Challenges and opportunities for phenotyping roots and the microbiome for sustainable bioenergy crop production. The Plant Phenome Journal, 2022, 5, .	1.0	9
158	The use of combination of zeolites to pursue integrated refined pyrolysis oil from kraft lignin. Sustainable Chemical Processes, 2014, 2, .	2.3	8
159	The physiochemical alteration of flax fibers structuring components after different scouring and bleaching treatments. Industrial Crops and Products, 2021, 160, 113112.	2.5	8
160	Degradation of aromatic compounds and lignin by marine protist Thraustochytrium striatum. Process Biochemistry, 2021, 107, 13-17.	1.8	8
161	Strikingly high amount of tricin-lignin observed from vanilla (<i>Vanilla planifolia</i>) aerial roots. Green Chemistry, 2022, 24, 259-270.	4.6	8
162	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.	2.5	7

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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.	3.2	7
164	Molecular Engineering of Biorefining Lignin Waste for Solid-State Electrolyte. ACS Sustainable Chemistry and Engineering, 2022, 10, 8704-8714.	3.2	7
165	Simultaneous depolymerization and fermentation of lignin into value-added products by the marine protist, Thraustochytrium striatum. Algal Research, 2020, 46, 101773.	2.4	6
166	Black Liquor Valorization by Using Marine Protist Thraustochytrium striatum and the Preliminary Metabolic Mechanism Study. ACS Sustainable Chemistry and Engineering, 2020, 8, 1786-1796.	3.2	5
167	Enhancing Lignin Dispersion and Bioconversion by Eliminating Thermal Sterilization. ACS Sustainable Chemistry and Engineering, 2022, 10, 3245-3254.	3.2	4
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