Chenhuan

List of Publications by Year
in descending order

69 papers	2,238 citations	185998 28 h-index	243296 44 g-index
72 all docs	72 docs citations	72 times ranked	1605 citing authors

#	Article	IF	Citations
1	Coupling the post-extraction process to remove residual lignin and alter the recalcitrant structures for improving the enzymatic digestibility of acid-pretreated bamboo residues. Bioresource Technology, 2019, 285, 121355.	4.8	212
2	Unveiling the Structural Properties of Ligninâ€“Carbohydrate Complexes in Bamboo Residues and Its Functionality as Antioxidants and Immunostimulants. ACS Sustainable Chemistry and Engineering, 2018, 6, 12522-12531.	3.2	97
3	Contrasting effects of hardwood and softwood organosolv lignins on enzymatic hydrolysis of lignocellulose. Bioresource Technology, 2014, 163, 320-327.	4.8	78
4	Enhanced enzymatic digestibility of mixed wood sawdust by lignin modification with naphthol derivatives during dilute acid pretreatment. Bioresource Technology, 2018, 269, 18-24.	4.8	75
5	Construction of arabinogalactans/selenium nanoparticles composites for enhancement of the antitumor activity. International Journal of Biological Macromolecules, 2019, 128, 444-451.	3.6	71
6	Green solvent pretreatment for enhanced production of sugars and antioxidative lignin from poplar. Bioresource Technology, 2021, 321, 124471.	4.8	71
7	An integrated process to produce bio-ethanol and xylooligosaccharides rich in xylobiose and xylotriose from high ash content waste wheat straw. Bioresource Technology, 2017, 241, 228-235.	4.8	70
8	Remarkable solvent and extractable lignin effects on enzymatic digestibility of organosolv pretreated hardwood. Bioresource Technology, 2014, 156, 92-99.	4.8	68
9	Natural surfactant-aided dilute sulfuric acid pretreatment of waste wheat straw to enhance enzymatic hydrolysis efficiency. Bioresource Technology, 2021, 324, 124651.	4.8	65
10	Improving enzymatic hydrolysis efficiency of wheat straw through sequential autohydrolysis and alkaline post-extraction. Bioresource Technology, 2018, 251, 374-380.	4.8	62
11	An integrated process to produce prebiotic xylooligosaccharides by autohydrolysis, nanofiltration and endo-xylanase from alkali-extracted xylan. Bioresource Technology, 2020, 314, 123685.	4.8	59
12	Co-production of xylooligosaccharides and fermentable sugars from poplar through acetic acid pretreatment followed by poly (ethylene glycol) ether assisted alkali treatment. Bioresource Technology, 2019, 288, 121569.	4.8	57
13	Lignin Alkylation Enhances Enzymatic Hydrolysis of Lignocellulosic Biomass. Energy & Fuels, 2017, 31, 12317-12326.	2.5	56
14	Understanding the Nonproductive Enzyme Adsorption and Physicochemical Properties of Residual Lignins in Moso Bamboo Pretreated with Sulfuric Acid and Kraft Pulping. Applied Biochemistry and Biotechnology, 2016, 180, 1508-1523.	1.4	54
15	Comparative study on enzymatic digestibility of acid-pretreated poplar and larch based on a comprehensive analysis of the lignin-derived recalcitrance. Bioresource Technology, 2021, 319, 124225.	4.8	54
16	Prewashing enhances the liquid hot water pretreatment efficiency of waste wheat straw with high free ash content. Bioresource Technology, 2016, 219, 583-588.	4.8	51
17	Synergistic effects of hydrothermal and deep eutectic solvent pretreatment on co-production of xylo-oligosaccharides and enzymatic hydrolysis of poplar. Bioresource Technology, 2021, 341, 125787.	4.8	50
18	Revealing the mechanism of surfactant-promoted enzymatic hydrolysis of dilute acid pretreated bamboo. Bioresource Technology, 2022, 360, 127524.	4.8	46

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19	Co-production of bio-ethanol, xylonic acid and slow-release nitrogen fertilizer from low-cost straw pulping solid residue. Bioresource Technology, 2018, 250, 365-373.	4.8	45
20	Disparate roles of solvent extractable lignin and residual bulk lignin in enzymatic hydrolysis of pretreated sweetgum. RSC Advances, 2015, 5, 97966-97974.	1.7	44
21	Promoting enzymatic hydrolysis of aggregated bamboo crystalline cellulose by fast microwave-assisted dicarboxylic acid deep eutectic solvents pretreatments. Bioresource Technology, 2021, 333, 125122.	4.8	44
22	Unlocking the secret of lignin-enzyme interactions: Recent advances in developing state-of-the-art analytical techniques. Biotechnology Advances, 2022, 54, 107830.	6.0	44
23	Characterization of arabinogalactans from Larix principis-rupprechtii and their effects on NO production by macrophages. Carbohydrate Polymers, 2018, 200, 408-415.	5.1	43
24	New strategy to elucidate the positive effects of extractable lignin on enzymatic hydrolysis by quartz crystal microbalance with dissipation. Biotechnology for Biofuels, 2019, 12, 57.	6.2	43
25	Enhanced enzymatic saccharification of corn stover by in situ modification of lignin with poly (ethylene glycol) ether during low temperature alkali pretreatment. Bioresource Technology, 2017, 244, 92-99.	4.8	42
26	Efficient production of xylooligosaccharides rich in xylobiose and xylotriose from poplar by hydrothermal pretreatment coupled with post-enzymatic hydrolysis. Bioresource Technology, 2021, 342, 125955.	4.8	37
27	Co-production of xylooligosaccharides and glucose from birch sawdust by hot water pretreatment and enzymatic hydrolysis. Bioresource Technology, 2022, 348, 126795.	4.8	32
28	Facilitating enzymatic digestibility of larch by in-situ lignin modification during combined acid and alkali pretreatment. Bioresource Technology, 2020, 311, 123517.	4.8	31
29	Humic acid-assisted autohydrolysis of waste wheat straw to sustainably improve enzymatic hydrolysis. Bioresource Technology, 2020, 306, 123103.	4.8	31
30	Incorporating Lignin into Polyethylene Glycol Enhanced Its Performance for Promoting Enzymatic Hydrolysis of Hardwood. ACS Sustainable Chemistry and Engineering, 2020, 8, 1797-1804.	3.2	29
31	Use of metal chlorides during waste wheat straw autohydrolysis to overcome the self-buffering effect. Bioresource Technology, 2018, 268, 259-265.	4.8	28
32	Lignin fractionation to realize the comprehensive elucidation of structure-inhibition relationship of lignins in enzymatic hydrolysis. Bioresource Technology, 2022, 355, 127255.	4.8	27
33	Sulfated modification of arabinogalactans from Larix principis-rupprechtii and their antitumor activities. Carbohydrate Polymers, 2019, 215, 207-212.	5.1	26
34	Biomimetic galactomannan/bentonite/graphene oxide film with superior mechanical and fire retardant properties by borate cross-linking. Carbohydrate Polymers, 2020, 245, 116508.	5.1	25
35	Co-production of amino acid-rich xylooligosaccharide and single-cell protein from paper mulberry by autohydrolysis and fermentation technologies. , 2022, 15, 1.		23
36	A structureâ€“activity understanding of the interaction between lignin and various cellulase domains. Bioresource Technology, 2022, 351, 127042.	4.8	19

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37	Effects of Mannanoligosaccharide Supplementation on the Growth Performance, Immunity, and Oxidative Status of Partridge Shank Chickens. Animals, 2019, 9, 817.	1.0	18
38	The effects of exogenous ash on the autohydrolysis and enzymatic hydrolysis of wheat straw. Bioresource Technology, 2019, 286, 121411.	4.8	18
39	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
40	Arabinogalactans from Larix principis-rupprechtii: An investigation into the structure-function contribution of side-chain structures. Carbohydrate Polymers, 2020, 227, 115354.	5.1	17
41	Effects of seleno-Sesbania canabina galactomannan on anti-oxidative and immune function of macrophage. Carbohydrate Polymers, 2021, 261, 117833.	5.1	17
42	Revealing the influence of metallic chlorides pretreatment on chemical structures of lignin and enzymatic hydrolysis of waste wheat straw. Bioresource Technology, 2021, 342, 125983.	4.8	17
43	Synergistic effects of pH and organosolv lignin addition on the enzymatic hydrolysis of organosolv-pretreated loblolly pine. RSC Advances, 2018, 8, 13835-13841.	1.7	16
44	A facile quantitative characterization method of incomplete degradation products of galactomannan by ethanol fractional precipitation. Carbohydrate Polymers, 2020, 250, 116951.	5.1	15
45	The key role of delignification in overcoming the inherent recalcitrance of Chinese fir for biorefining. Bioresource Technology, 2021, 319, 124154.	4.8	15
46	Promoting enzymatic saccharification of organosolv-pretreated poplar sawdust by saponin-rich tea seed waste. Bioprocess and Biosystems Engineering, 2020, 43, 1999-2007.	1.7	14
47	Improving the enzymatic hydrolysis of larch by coupling water pre-extraction with alkaline hydrogen peroxide post-treatment and adding enzyme cocktail. Bioresource Technology, 2019, 285, 121322.	4.8	13
48	Relations Between Moso Bamboo Surface Properties Pretreated by Kraft Cooking and Dilute Acid with Enzymatic Digestibility. Applied Biochemistry and Biotechnology, 2017, 183, 1526-1538.	1.4	12
49	Actuating, shape reconstruction, and reinforcement of galactomannan-based hydrogels by coordination bonds induced metal ions capture. International Journal of Biological Macromolecules, 2020, 165, 2721-2730.	3.6	12
50	Bioinspired manufacturing of oriented polysaccharides scaffolds for strong, optical haze and anti-UV/bacterial membranes. Carbohydrate Polymers, 2021, 270, 118328.	5.1	12
51	Production performance, egg quality, plasma biochemical constituents and lipid metabolites of aged laying hens supplemented with incomplete degradation products of galactomannan. Poultry Science, 2021, 100, 101296.	1.5	11
52	Critical Review of Solidification of Sandy Soil by Microbially Induced Carbonate Precipitation (MICP). Crystals, 2021, 11, 1439.	1.0	11
53	The immunomodulatory activity of degradation products of Sesbania cannabina galactomannan with different molecular weights. International Journal of Biological Macromolecules, 2022, 205, 530-538.	3.6	11
54	Fungal chitosan production using xylose rich of corn stover prehydrolysate by Rhizopus oryzae. Biotechnology and Biotechnological Equipment, 2017, 31, 1160-1166.	0.5	10

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55	Comprehensive understanding of the effects of metallic cations on enzymatic hydrolysis of humic acid-pretreated waste wheat straw. Biotechnology for Biofuels, 2021, 14, 25.	6.2	10
56	The Increase of Incomplete Degradation Products of Galactomannan Production by Synergetic Hydrolysis of Î²-Mannanase and Î±-Galactosidase. Applied Biochemistry and Biotechnology, 2021, 193, 405-416.	1.4	9
57	Progress in Preparation of Cellulase from Lignocellulose Using Fungi. Biotechnology and Bioprocess Engineering, 2021, 26, 871-886.	1.4	9
58	Fabrication of hydrophobic and high-strength packaging films based on the esterification modification of galactomannan. International Journal of Biological Macromolecules, 2021, 167, 1221-1229.	3.6	7
59	Novel approach to produce biomass-derived oligosaccharides simultaneously by recombinant endoglucanase from Trichoderma reesei. Enzyme and Microbial Technology, 2020, 134, 109481.	1.6	6
60	The in vitro and in vivo Antioxidant and Immunomodulatory Activity of Incomplete Degradation Products of Hemicellulosic Polysaccharide (Galactomannan) From Sesbania cannabina. Frontiers in Bioengineering and Biotechnology, 2021, 9, 679558.	2.0	5
61	Facile adjustment on cellulose nanocrystals composite films with glycerol and benzyl acrylate copolymer for enhanced UV shielding property. International Journal of Biological Macromolecules, 2022, 204, 41-49.	3.6	5
62	Biomimetic strategy to synthesize a strong, tough and elastic cellulose enhanced magnetic hydrogel. Journal of Materials Science, 2022, 57, 12138-12146.	1.7	5
63	A method for quantitative characterization of incomplete degradation products of polygalacturonic acid. International Journal of Biological Macromolecules, 2021, 188, 343-349.	3.6	4
64	Incomplete degradation products of galactomannan from Sesbania canabina modulated the caecal microbial community of laying hens. Journal of Animal Science, 2022, , .	0.2	4
65	Rheological properties of Sesbania cannabina galactomannan as a new source of thickening agent. Journal of Food Science, 2022, 87, 1527-1539.	1.5	4
66	Organosolv lignin properties and their effects on enzymatic hydrolysis. BioResources, 2020, 15, 8909-8924.	0.5	2
67	Effects of the Hofmeister anion series salts on the rheological properties of Sesbania cannabina galactomannan. International Journal of Biological Macromolecules, 2021, 188, 350-358.	3.6	1
68	Using One-pot Fermentation Technology to Prepare Enzyme Cocktail to Sustainably Produce Low Molecular Weight Galactomannans from Sesbania cannabina Seeds. Applied Biochemistry and Biotechnology, 2022, 194, 3016-3030.	1.4	1
69	Dietary Mannanoligosaccharide Supplementation Improves Growth Performance, Intestinal Integrity, Serum Immunity, and Antioxidant Capacity of Partridge Shank Chickens. Journal of Poultry Science, 2021, 58, 147-153.	0.7	0