

# Huizhen Hu

## List of Publications by Year in descending order

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64  
papers

5,191  
citations

87888

38  
h-index

110387

64  
g-index

65  
all docs

65  
docs citations

65  
times ranked

4003  
citing authors

#	ARTICLE	IF	CITATIONS
1	Integrating mild chemical pretreatments with endogenous protein supplement for complete biomass saccharification to maximize bioethanol production by enhancing cellulases adsorption in novel bioenergy Amaranthus. <i>Industrial Crops and Products</i> , 2022, 177, 114471.	5.2	15
2	Double integrating XYL2 into engineered <i>Saccharomyces cerevisiae</i> strains for consistently enhanced bioethanol production by effective xylose and hexose co-consumption of steam-exploded lignocellulose in bioenergy crops. <i>Renewable Energy</i> , 2022, 186, 341-349.	8.9	16
3	Insights into pectin dominated enhancements for elimination of toxic Cd and dye coupled with ethanol production in desirable lignocelluloses. <i>Carbohydrate Polymers</i> , 2022, 286, 119298.	10.2	15
4	Distinctively altered lignin biosynthesis by site-specific modification of <i>OsCAD2</i> for enhanced biomass saccharification in rice. <i>GCB Bioenergy</i> , 2021, 13, 305-319.	5.6	21
5	Ecologically adaptable <i>Populus simonii</i> is specific for recalcitrance-reduced lignocellulose and largely enhanced enzymatic saccharification among woody plants. <i>GCB Bioenergy</i> , 2021, 13, 348-360.	5.6	11
6	Cascading of engineered bioenergy plants and fungi sustainable for low-cost bioethanol and high-value biomaterials under green-like biomass processing. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 137, 110586.	16.4	68
7	Optimizing two green-like biomass pretreatments for maximum bioethanol production using banana pseudostem by effectively enhancing cellulose depolymerization and accessibility. <i>Sustainable Energy and Fuels</i> , 2021, 5, 3467-3478.	4.9	12
8	Using Amaranthus green proteins as universal biosurfactant and biosorbent for effective enzymatic degradation of diverse lignocellulose residues and efficient multiple trace metals remediation of farming lands. <i>Journal of Hazardous Materials</i> , 2021, 406, 124727.	12.4	56
9	Integrated NIRS and QTL assays reveal minor mannose and galactose as contrast lignocellulose factors for biomass enzymatic saccharification in rice. <i>Biotechnology for Biofuels</i> , 2021, 14, 144.	6.2	8
10	Diverse Banana Pseudostems and Rachis Are Distinctive for Edible Carbohydrates and Lignocellulose Saccharification towards High Bioethanol Production under Chemical and Liquid Hot Water Pretreatments. <i>Molecules</i> , 2021, 26, 3870.	3.8	4
11	Modified lignocellulose and rich starch for complete saccharification to maximize bioethanol in distinct polyploidy potato straw. <i>Carbohydrate Polymers</i> , 2021, 265, 118070.	10.2	31
12	Integrated genetic and chemical modification with rice straw for maximum bioethanol production. <i>Industrial Crops and Products</i> , 2021, 173, 114133.	5.2	10
13	Down-regulation of <i>OsMYB103L</i> distinctively alters beta-1,4-glucan polymerization and cellulose microfibrils assembly for enhanced biomass enzymatic saccharification in rice. <i>Biotechnology for Biofuels</i> , 2021, 14, 245.	6.2	14
14	Quantum dots are conventionally applicable for wide-profiling of wall polymer distribution and destruction in diverse cells of rice. <i>Talanta</i> , 2020, 208, 120452.	5.5	2
15	Mechanism of lignocellulose modification and enzyme disadsorption for complete biomass saccharification to maximize bioethanol yield in rapeseed stalks. <i>Sustainable Energy and Fuels</i> , 2020, 4, 607-618.	4.9	33
16	A mechanism for efficient cadmium phytoremediation and high bioethanol production by combined mild chemical pretreatments with desirable rapeseed stalks. <i>Science of the Total Environment</i> , 2020, 708, 135096.	8.0	25
17	Modeling of optimal green liquor pretreatment for enhanced biomass saccharification and delignification by distinct alteration of wall polymer features and biomass porosity in <i>Miscanthus</i> . <i>Renewable Energy</i> , 2020, 159, 1128-1138.	8.9	53
18	A novel rice fragile culm 24 mutant encodes a UDP-glucose epimerase that affects cell wall properties and photosynthesis. <i>Journal of Experimental Botany</i> , 2020, 71, 2956-2969.	4.8	30

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19	Distinct mechanisms of enzymatic saccharification and bioethanol conversion enhancement by three surfactants under steam explosion and mild chemical pretreatments in bioenergy Miscanthus. <i>Industrial Crops and Products</i> , 2020, 153, 112559.	5.2	47
20	Brassinosteroid overproduction improves lignocellulose quantity and quality to maximize bioethanol yield under green-like biomass process in transgenic poplar. <i>Biotechnology for Biofuels</i> , 2020, 13, 9.	6.2	28
21	Cotton CSLD3 restores cell elongation and cell wall integrity mainly by enhancing primary cellulose production in the Arabidopsis cesa6 mutant. <i>Plant Molecular Biology</i> , 2019, 101, 389-401.	3.9	21
22	Altered carbon assimilation and cellulose accessibility to maximize bioethanol yield under low-cost biomass processing in corn brittle stalk. <i>Green Chemistry</i> , 2019, 21, 4388-4399.	9.0	49
23	Overproduction of native endo- $\beta$ -1,4-glucanases leads to largely enhanced biomass saccharification and bioethanol production by specific modification of cellulose features in transgenic rice. <i>Biotechnology for Biofuels</i> , 2019, 12, 11.	6.2	68
24	Combined mild chemical pretreatments for complete cadmium release and cellulosic ethanol co-production distinctive in wheat mutant straw. <i>Green Chemistry</i> , 2019, 21, 3693-3700.	9.0	45
25	A finalized determinant for complete lignocellulose enzymatic saccharification potential to maximize bioethanol production in bioenergy Miscanthus. <i>Biotechnology for Biofuels</i> , 2019, 12, 99.	6.2	92
26	Cellulosic ethanol production: Progress, challenges and strategies for solutions. <i>Biotechnology Advances</i> , 2019, 37, 491-504.	11.7	260
27	Genetic loci simultaneously controlling lignin monomers and biomass digestibility of rice straw. <i>Scientific Reports</i> , 2018, 8, 3636.	3.3	17
28	Cellulose Synthase Mutants Distinctively Affect Cell Growth and Cell Wall Integrity for Plant Biomass Production in Arabidopsis. <i>Plant and Cell Physiology</i> , 2018, 59, 1144-1157.	3.1	44
29	Miscanthus accessions distinctively accumulate cadmium for largely enhanced biomass enzymatic saccharification by increasing hemicellulose and pectin and reducing cellulose CrI and DP. <i>Bioresource Technology</i> , 2018, 263, 67-74.	9.6	38
30	AtCSLD3 and GhCSLD3 mediate root growth and cell elongation downstream of the ethylene response pathway in Arabidopsis. <i>Journal of Experimental Botany</i> , 2018, 69, 1065-1080.	4.8	22
31	Mild chemical pretreatments are sufficient for bioethanol production in transgenic rice straws overproducing glucosidase. <i>Green Chemistry</i> , 2018, 20, 2047-2056.	9.0	70
32	Ectopic expression of a novel <i>OsExtensin-like</i> gene consistently enhances plant lodging resistance by regulating cell elongation and cell wall thickening in rice. <i>Plant Biotechnology Journal</i> , 2018, 16, 254-263.	8.3	74
33	Three <i>AtCesA6-like</i> members enhance biomass production by distinctively promoting cell growth in <i>Arabidopsis</i> . <i>Plant Biotechnology Journal</i> , 2018, 16, 976-988.	8.3	49
34	Expression, functional analysis and mutation of a novel neutral zearalenone-degrading enzyme. <i>International Journal of Biological Macromolecules</i> , 2018, 118, 1284-1292.	7.5	49
35	Distinct polymer extraction and cellulose DP reduction for complete cellulose hydrolysis under mild chemical pretreatments in sugarcane. <i>Carbohydrate Polymers</i> , 2018, 202, 434-443.	10.2	45
36	OsCESA9 conserved site mutation leads to largely enhanced plant lodging resistance and biomass enzymatic saccharification by reducing cellulose DP and crystallinity in rice. <i>Plant Biotechnology Journal</i> , 2017, 15, 1093-1104.	8.3	143

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37	Steam-exploded biomass saccharification is predominately affected by lignocellulose porosity and largely enhanced by Tween-80 in Miscanthus. <i>Bioresource Technology</i> , 2017, 239, 74-81.	9.6	55
38	AtCesA8-driven OsSUS3 expression leads to largely enhanced biomass saccharification and lodging resistance by distinctively altering lignocellulose features in rice. <i>Biotechnology for Biofuels</i> , 2017, 10, 221.	6.2	67
39	A precise and consistent assay for major wall polymer features that distinctively determine biomass saccharification in transgenic rice by near-infrared spectroscopy. <i>Biotechnology for Biofuels</i> , 2017, 10, 294.	6.2	29
40	Tween-80 is effective for enhancing steam-exploded biomass enzymatic saccharification and ethanol production by specifically lessening cellulase absorption with lignin in common reed. <i>Applied Energy</i> , 2016, 175, 82-90.	10.1	153
41	Proteomic profiling of cellulase-aid-extracted membrane proteins for functional identification of cellulose synthase complexes and their potential associated- components in cotton fibers. <i>Scientific Reports</i> , 2016, 6, 26356.	3.3	7
42	Genetic modification of plant cell walls to enhance biomass yield and biofuel production in bioenergy crops. <i>Biotechnology Advances</i> , 2016, 34, 997-1017.	11.7	175
43	G-lignin and hemicellulosic monosaccharides distinctively affect biomass digestibility in rapeseed. <i>Bioresource Technology</i> , 2016, 203, 325-333.	9.6	43
44	Steam explosion distinctively enhances biomass enzymatic saccharification of cotton stalks by largely reducing cellulose polymerization degree in <i>G. barbadense</i> and <i>G. hirsutum</i> . <i>Bioresource Technology</i> , 2015, 181, 224-230.	9.6	100
45	Lignin extraction distinctively enhances biomass enzymatic saccharification in hemicelluloses-rich <i>Miscanthus</i> species under various alkali and acid pretreatments. <i>Bioresource Technology</i> , 2015, 183, 248-254.	9.6	109
46	Ammonium oxalate-extractable uronic acids positively affect biomass enzymatic digestibility by reducing lignocellulose crystallinity in <i>Miscanthus</i> . <i>Bioresource Technology</i> , 2015, 196, 391-398.	9.6	44
47	A near infrared spectroscopic assay for stalk soluble sugars, bagasse enzymatic saccharification and wall polymers in sweet sorghum. <i>Bioresource Technology</i> , 2015, 177, 118-124.	9.6	33
48	High-level hemicellulosic arabinose predominately affects lignocellulose crystallinity for genetically enhancing both plant lodging resistance and biomass enzymatic digestibility in rice mutants. <i>Plant Biotechnology Journal</i> , 2015, 13, 514-525.	8.3	139
49	Biomass Enzymatic Saccharification Is Determined by the Non-KOH-Extractable Wall Polymer Features That Predominately Affect Cellulose Crystallinity in Corn. <i>PLoS ONE</i> , 2014, 9, e108449.	2.5	38
50	Sugar-rich sweet sorghum is distinctively affected by wall polymer features for biomass digestibility and ethanol fermentation in bagasse. <i>Bioresource Technology</i> , 2014, 167, 14-23.	9.6	63
51	Mild alkali-pretreatment effectively extracts guaiacyl-rich lignin for high lignocellulose digestibility coupled with largely diminishing yeast fermentation inhibitors in <i>Miscanthus</i> . <i>Bioresource Technology</i> , 2014, 169, 447-454.	9.6	101
52	An integrated genomic and metabolomic framework for cell wall biology in rice. <i>BMC Genomics</i> , 2014, 15, 596.	2.8	26
53	Distinct biochemical activities and heat shock responses of two UDP-glucose sterol glucosyltransferases in cotton. <i>Plant Science</i> , 2014, 219-220, 1-8.	3.6	26
54	Three lignocellulose features that distinctively affect biomass enzymatic digestibility under NaOH and H <sub>2</sub> SO <sub>4</sub> pretreatments in <i>Miscanthus</i> . <i>Bioresource Technology</i> , 2013, 130, 30-37.	9.6	111

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55	Biomass digestibility is predominantly affected by three factors of wall polymer features distinctive in wheat accessions and rice mutants. <i>Biotechnology for Biofuels</i> , 2013, 6, 183.	6.2	106
56	Arabinose substitution degree in xylan positively affects lignocellulose enzymatic digestibility after various NaOH/H <sub>2</sub> SO <sub>4</sub> pretreatments in <i>Miscanthus</i> . <i>Bioresource Technology</i> , 2013, 130, 629-637.	9.6	108
57	An integrative analysis of four CESA isoforms specific for fiber cellulose production between <i>Gossypium hirsutum</i> and <i>Gossypium barbadense</i> . <i>Planta</i> , 2013, 237, 1585-1597.	3.2	68
58	Hemicelluloses negatively affect lignocellulose crystallinity for high biomass digestibility under NaOH and H <sub>2</sub> SO <sub>4</sub> pretreatments in <i>Miscanthus</i> . <i>Biotechnology for Biofuels</i> , 2012, 5, 58.	6.2	231
59	A rapid and consistent near infrared spectroscopic assay for biomass enzymatic digestibility upon various physical and chemical pretreatments in <i>Miscanthus</i> . <i>Bioresource Technology</i> , 2012, 121, 274-281.	9.6	71
60	Genetic Engineering of Energy Crops: A Strategy for Biofuel Production in China Free Access. <i>Journal of Integrative Plant Biology</i> , 2011, 53, 143-150.	8.5	87
61	Expression profiling and integrative analysis of the CESA/CSL superfamily in rice. <i>BMC Plant Biology</i> , 2010, 10, 282.	3.6	240
62	Sitosterol-beta -glucoside as Primer for Cellulose Synthesis in Plants. <i>Science</i> , 2002, 295, 147-150.	12.6	372
63	Fractionation of carbohydrates in <i>Arabidopsis</i> root cell walls shows that three radial swelling loci are specifically involved in cellulose production. <i>Planta</i> , 2000, 211, 406-414.	3.2	227
64	Molecular Analysis of Cellulose Biosynthesis in <i>Arabidopsis</i> . <i>Science</i> , 1998, 279, 717-720.	12.6	777