Xuebing Zhao

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

102 papers	5,448 citations	37 h-index	73 g-index
108 ext. papers	6,369 ext. citations	6.8 avg, IF	6.33 L-index

#	Paper	IF	Citations
102	All-iron ions mediated electron transfer for biomass pretreatment coupling with direct generation of electricity from lignocellulose. *Bioresource Technology*, **2022**, 344, 126189	11	1
101	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	8.1	1
100	Response mechanisms of Saccharomyces cerevisiae to the stress factors present in lignocellulose hydrolysate and strategies for constructing robust strains. **2022**, 15, 28		0
99	Asymmetric acidic-alkaline design achieves high power density for a direct ascorbate liquid fuel cell without using noble metal catalysts. *Energy Conversion and Management*, **2022**, 255, 115343	10.6	1
98	Promoting transfer of endogenous electrons well increases the carbon and energy efficiency of lignocellulosic biomass conversion to fuels and chemicals. *Energy Conversion and Management*, **2022**, 258, 115552	10.6	0
97	Sustainable production of levulinic acid and its derivatives for fuel additives and chemicals: progress, challenges, and prospects. *Green Chemistry*, **2021**, 23, 9198-9238	10	7
96	Catalytic Conversion of Xylose to Furfural by -Toluenesulfonic Acid (TSA) and Chlorides: Process Optimization and Kinetic Modeling. *Molecules*, **2021**, 26,	4.8	8
95	Phenomenological Modeling of Formic Acid Fractionation of Sugarcane Bagasse by Integration of Operation Parameters as an Extended Combined Severity Factor. *Molecules*, **2021**, 26,	4.8	1
94	Coupling biomass pretreatment for enzymatic hydrolysis and direct biomass-to-electricity conversion with molybdovanadophosphoric heteropolyacids as anode electron transfer carriers. *Journal of Energy Chemistry*, **2021**, 58, 133-146	12	5
93	Lignocellulosic biomass as sustainable feedstock and materials for power generation and energy storage. *Journal of Energy Chemistry*, **2021**, 57, 247-280	12	87
92	Conversion of Glucose to 5-Hydroxymethylfurfural by Co-catalysis of p-Toluenesulfonic Acid (pTSA) and Chlorides: A Comparison Based on Kinetic Modeling. *Waste and Biomass Valorization*, **2021**, 12, 3271-3286	3.2	9
91	Deconstruction of Lignocellulose Recalcitrance by Organosolv Fractionating Pretreatment for Enzymatic Hydrolysis **2021**, 23-56		
90	Conversion of lignocellulose to biofuels and chemicals via sugar platform: An updated review on chemistry and mechanisms of acid hydrolysis of lignocellulose. *Renewable and Sustainable Energy Reviews*, **2021**, 146, 111169	16.2	30
89	Haze to electricity: Efficiently harvesting electric energy from air pollutants by construction of bioinspired electron transport chains in light- and heat-driven liquid flow fuel cells. *Chemical Engineering Journal*, **2021**, 420, 129716	14.7	5
88	Synthesis, characterization and application of a new biomass-based antioxidant derived from vanillin and methyl ethyl ketone. *Journal of Cleaner Production*, **2021**, 316, 128315	10.3	0
87	Overexpressing CCW12 in Saccharomyces cerevisiae enables highly efficient ethanol production from lignocellulose hydrolysates. *Bioresource Technology*, **2021**, 337, 125487	11	3
86	Life cycle assessment of organosolv biorefinery designs with the complete use of biomass. *Energy Conversion and Management*, **2021**, 246, 114653	10.6	4

85	Ferricyanide and vanadyl (V) mediated electron transfer for converting lignin to electricity by liquid flow fuel cell with power density reaching 200 mW/cm2. *Applied Energy*, **2021**, 304, 117927	10.7	4
84	Conversion of fatty acid methyl ester to epoxy plasticizer by auto-catalyzed in situ formation of performic acid: Kinetic modeling and application of the model. *Journal of Cleaner Production*, **2020**, 259, 120791	10.3	4
83	Kinetic modelling of acid-catalyzed liquid-phase dehydration of bio-based 2, 3-butanediol considering a newly identified by-product and an updated reaction network. *Chemical Engineering Journal*, **2020**, 389, 124451	14.7	5
82	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. *Bioresources and Bioprocessing*, **2020**, 7,	5.2	18
81	Construction of electron transfer chains with methylene blue and ferric ions for direct conversion of lignocellulosic biomass to electricity in a wide pH range. *Applied Catalysis B: Environmental*, **2020**, 265, 118578	21.8	14
80	Pretreatment of lignocellulosic biomass for efficient enzymatic saccharification of cellulose **2020**, 17-65		17
79	High value-added monomer chemicals and functional bio-based materials derived from polymeric components of lignocellulose by organosolv fractionation. *Biofuels, Bioproducts and Biorefining*, **2020**, 14, 371-401	5.3	29
78	Heterogeneity of lignocellulose must be considered for kinetic study: A case on formic acid fractionation of sugarcane bagasse with different pseudo-homogeneous kinetic models. *Renewable Energy*, **2020**, 162, 2246-2258	8.1	5
77	Organic acid catalyzed production of platform chemical 5-hydroxymethylfurfural from fructose: Process comparison and evaluation based on kinetic modeling. *Arabian Journal of Chemistry*, **2020**, 13, 7430-7444	5.9	15
76	Production of biojet fuels from biomass **2019**, 127-165		1
75	Multi-products co-production improves the economic feasibility of cellulosic ethanol: A case of Formiline pretreatment-based biorefining. *Applied Energy*, **2019**, 250, 229-244	10.7	21
74	Evaluation of the mass transfer effects on delignification kinetics of atmospheric acetic acid fractionation of sugarcane bagasse with a shrinking-layer model. *Bioresource Technology*, **2018**, 261, 52-61	11	10
73	Enzymatic ethanolysis of fish oil for selective concentration of polyunsaturated fatty acids (PUFAs) with flexible production of corresponding glycerides and ethyl esters. *Journal of Chemical Technology and Biotechnology*, **2018**, 93, 2399-2405	3.5	11
72	Visualizing cellulase adsorption and quantitatively determining cellulose accessibility with an updated fungal cellulose-binding module-based fluorescent probe protein. *Biotechnology for Biofuels*, **2018**, 11, 105	7.8	12
71	A novel route for the flexible preparation of hydrocarbon jet fuels from biomass-based platform chemicals: a case of using furfural and 2,3-butanediol as feedstocks. *Green Chemistry*, **2018**, 20, 2018-2026	10	30
70	Preparation of Epoxidized Fatty Acid Methyl Ester with in situ Auto-Catalyzed Generation of Performic Acid and the Influence of Impurities on Epoxidation. *Waste and Biomass Valorization*, **2018**, 9, 1881-1891	3.2	10
69	Production of 2,5-furandicarboxylic acid (FDCA) from 5-hydroxymethylfurfural (HMF): recent progress focusing on the chemical-catalytic routes. *Green Chemistry*, **2018**, 20, 5427-5453	10	246
68	Chemicals, Materials, and Catalysts from Natural Renewable Lignocelluloses. *International Journal of Polymer Science*, **2018**, 2018, 1-2	2.4	

67	Evaluation of the action of Tween 20 non-ionic surfactant during enzymatic hydrolysis of lignocellulose: Pretreatment, hydrolysis conditions and lignin structure. *Bioresource Technology*, **2018**, 269, 329-338	11	46
66	The fate of lignin during atmospheric acetic acid pretreatment of sugarcane bagasse and the impacts on cellulose enzymatic hydrolyzability for bioethanol production. *Renewable Energy*, **2018**, 128, 200-209	8.1	34
65	Integrative transcriptomic and proteomic analysis of the mutant lignocellulosic hydrolyzate-tolerant. *Engineering in Life Sciences*, **2017**, 17, 249-261	3.4	17
64	Phosphomolybdic acid and ferric iron as efficient electron mediators for coupling biomass pretreatment to produce bioethanol and electricity generation from wheat straw. *Bioresource Technology*, **2017**, 228, 279-289	11	24
63	Solvent-based delignification and decrystallization of wheat straw for efficient enzymatic hydrolysis of cellulose and ethanol production with low cellulase loadings. *RSC Advances*, **2017**, 7, 10609-10617	3.7	22
62	Organosolv fractionating pre-treatment of lignocellulosic biomass for efficient enzymatic saccharification: chemistry, kinetics, and substrate structures. *Biofuels, Bioproducts and Biorefining*, **2017**, 11, 567-590	5.3	139
61	Hierarchy Nano- and Ultrastructure of Lignocellulose and Its Impact on the Bioconversion of Cellulose. *Green Chemistry and Sustainable Technology*, **2017**, 117-151	1.1	7
60	Low-temperature microbial and direct conversion of lignocellulosic biomass to electricity: Advances and challenges. *Renewable and Sustainable Energy Reviews*, **2017**, 71, 268-282	16.2	39
59	Phenomenological modeling and evaluation of formic acid pretreatment of wheat straw with an extended combined severity factor for biomass fractionation and enzymatic saccharification to produce bioethanol. *Journal of the Taiwan Institute of Chemical Engineers*, **2017**, 81, 140-149	5.3	13
58	Studying Nonproductive Adsorption Ability and Binding Approach of Cellobiohydrolase to Lignin during Bioconversion of Lignocellulose. *Energy & Fuels*, **2017**, 31, 14393-14400	4.1	12
57	Integration of heterologous 4-hydroxybenzoic acid transport proteins in Rhodobacter sphaeroides for enhancement of coenzyme Q10 production. *RSC Advances*, **2017**, 7, 17346-17352	3.7	8
56	Bioconversion of glycerol into lipids by in a two-stage process and characterization of lipid properties. *Engineering in Life Sciences*, **2017**, 17, 303-313	3.4	19
55	Polyoxometalate-Mediated Lignin Oxidation for Efficient Enzymatic Production of Sugars and Generation of Electricity from Lignocellulosic Biomass. *Energy Technology*, **2017**, 5, 1179-1185	3.5	15
54	A novel process on lipid extraction from microalgae for biodiesel production. *Energy*, **2016**, 115, 963-968	7.9	18
53	Renewable microbial lipid production from Oleaginous Yeast: some surfactants greatly improved lipid production of Rhodosporidium toruloides. *World Journal of Microbiology and Biotechnology*, **2016**, 32, 107	4.4	25
52	Structural Features of Formiline Pretreated Sugar Cane Bagasse and Their Impact on the Enzymatic Hydrolysis of Cellulose. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 1255-1261	8.3	18
51	Efficient Conversion of Lignin to Electricity Using a Novel Direct Biomass Fuel Cell Mediated by Polyoxometalates at Low Temperatures. *ChemSusChem*, **2016**, 9, 197-207	8.3	38
50	Improving the enzymatic hydrolysis of dilute acid pretreated wheat straw by metal ion blocking of non-productive cellulase adsorption on lignin. *Bioresource Technology*, **2016**, 208, 110-116	11	49

49	Relative Significance of the Negative Impacts of Hemicelluloses on Enzymatic Cellulose Hydrolysis Is Dependent on Lignin Content: Evidence from Substrate Structural Features and Protein Adsorption. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 6668-6679	8.3	31
48	A comparison of several organosolv pretreatments for improving the enzymatic hydrolysis of wheat straw: Substrate digestibility, fermentability and structural features. *Applied Energy*, **2015**, 150, 224-232	10.7	111
47	Kinetic modeling of atmospheric formic acid pretreatment of wheat straw with potential degree of reaction models. *RSC Advances*, **2015**, 5, 20992-21000	3.7	20
46	A Weibull statistics-based lignocellulose saccharification model and a built-in parameter accurately predict lignocellulose hydrolysis performance. *Biotechnology Journal*, **2015**, 10, 1424-33	5.6	7
45	Engineering surface hydrophobicity improves activity of Bacillus thermocatenulatus lipase 2 enzyme. *Biotechnology Journal*, **2015**, 10, 1762-9	5.6	10
44	A novel strategy for 1,3-propanediol recovery from fermentation broth and control of product colority using scraped thin-film evaporation for desalination. *RSC Advances*, **2015**, 5, 48269-48274	3.7	3
43	Exploration of sodium lignosulphonate's effects on lipid production by Rhodosporidium toruloides. *Process Biochemistry*, **2015**, 50, 424-431	4.8	7
42	Lipase-catalyzed process for biodiesel production: Enzyme immobilization, process simulation and optimization. *Renewable and Sustainable Energy Reviews*, **2015**, 44, 182-197	16.2	256
41	Non-ionic surfactants do not consistently improve the enzymatic hydrolysis of pure cellulose. *Bioresource Technology*, **2015**, 182, 136-143	11	69
40	Lipase-catalyzed process for biodiesel production: protein engineering and lipase production. *Biotechnology and Bioengineering*, **2014**, 111, 639-53	4.9	73
39	Isolation of oleaginous yeast (Rhodosporidium toruloides) mutants tolerant of sugarcane bagasse hydrolysate. *Bioscience, Biotechnology and Biochemistry*, **2014**, 78, 336-42	2.1	18
38	Biological co-production of ethanol and biodiesel from wheat straw: a case of dilute acid pretreatment. *RSC Advances*, **2014**, 4, 37878-37888	3.7	30
37	A novel kinetic model for polysaccharide dissolution during atmospheric acetic acid pretreatment of sugarcane bagasse. *Bioresource Technology*, **2014**, 151, 128-36	11	39
36	Kinetics of Strong Acid Hydrolysis of a Bleached Kraft Pulp for Producing Cellulose Nanocrystals (CNCs). *Industrial & Engineering Chemistry Research*, **2014**, 53, 11007-11014	3.9	116
35	Robust enzymatic hydrolysis of Formiline-pretreated oil palm empty fruit bunches (EFB) for efficient conversion of polysaccharide to sugars and ethanol. *Bioresource Technology*, **2014**, 166, 584-91	11	43
34	Novel mutant strains of Rhodosporidium toruloides by plasma mutagenesis approach and their tolerance for inhibitors in lignocellulosic hydrolyzate. *Journal of Chemical Technology and Biotechnology*, **2014**, 89, 735-742	3.5	42
33	Kinetic Modeling and Mechanisms of Acid-Catalyzed Delignification of Sugarcane Bagasse by Aqueous Acetic Acid. *Bioenergy Research*, **2013**, 6, 436-447	3.1	37
32	Batch and multi-step fed-batch enzymatic saccharification of Formiline-pretreated sugarcane bagasse at high solid loadings for high sugar and ethanol titers. *Bioresource Technology*, **2013**, 135, 350-6	11	65

31	Microbial oil production from various carbon sources and its use for biodiesel preparation. *Biofuels, Bioproducts and Biorefining*, **2013**, 7, 65-77	5.3	64
30	Kinetic modeling of fermentative production of 1, 3-propanediol by Klebsiella pneumoniae HR526 with consideration of multiple product inhibitions. *Applied Biochemistry and Biotechnology*, **2013**, 169, 312-26	3.2	11
29	Kinetics of lipase recovery from the aqueous phase of biodiesel production by macroporous resin adsorption and reuse of the adsorbed lipase for biodiesel preparation. *Enzyme and Microbial Technology*, **2013**, 52, 226-33	3.8	17
28	Simulation and experimentation on the gas holdup characteristics of a novel oscillating airlift loop reactor. *Journal of Chemical Technology and Biotechnology*, **2013**, 88, 704-710	3.5	5
27	Microbial conversion of biodiesel byproduct glycerol to triacylglycerols by oleaginous yeast Rhodosporidium toruloides and the individual effect of some impurities on lipid production. *Biochemical Engineering Journal*, **2012**, 65, 30-36	4.2	154
26	Kinetic model for glycan hydrolysis and formation of monosaccharides during dilute acid hydrolysis of sugarcane bagasse. *Bioresource Technology*, **2012**, 105, 160-8	11	51
25	Fractionating pretreatment of sugarcane bagasse by aqueous formic acid with direct recycle of spent liquor to increase cellulose digestibility--the Formiline process. *Bioresource Technology*, **2012**, 117, 25-32	11	72
24	Biotechnological production of succinic acid: current state and perspectives. *Biofuels, Bioproducts and Biorefining*, **2012**, 6, 302-318	5.3	146
23	Biomass recalcitrance. Part I: the chemical compositions and physical structures affecting the enzymatic hydrolysis of lignocellulose. *Biofuels, Bioproducts and Biorefining*, **2012**, 6, 465-482	5.3	561
22	Biomass recalcitrance. Part II: Fundamentals of different pre-treatments to increase the enzymatic digestibility of lignocellulose. *Biofuels, Bioproducts and Biorefining*, **2012**, 6, 561-579	5.3	177
21	Downstream processing of biotechnological produced succinic acid. *Applied Microbiology and Biotechnology*, **2012**, 95, 841-50	5.7	105
20	Effects of some inhibitors on the growth and lipid accumulation of oleaginous yeast Rhodosporidium toruloides and preparation of biodiesel by enzymatic transesterification of the lipid. *Bioprocess and Biosystems Engineering*, **2012**, 35, 993-1004	3.7	128
19	PRODUCTION OF 2,3-BUTANEDIOL BY KLEBSIELLA PNEUMONIAE FROM ENZYMATIC HYDROLYZATE OF SUGARCANE BAGASSE. *BioResources*, **2012**, 7,	1.3	7
18	Single-Stage Pulping of Sugarcane Bagasse with Peracetic Acid. *Journal of Wood Chemistry and Technology*, **2011**, 31, 1-25	2	12
17	Kinetics of Formic Acid-autocatalyzed Preparation of Performic Acid in Aqueous Phase. *Chinese Journal of Chemical Engineering*, **2011**, 19, 964-971	3.2	43
16	Production of pulp, ethanol and lignin from sugarcane bagasse by alkali-peracetic acid delignification. *Biomass and Bioenergy*, **2011**, 35, 2874-2882	5.3	44
15	Enzymatic hydrolysis and simultaneous saccharification and fermentation of alkali/peracetic acid-pretreated sugarcane bagasse for ethanol and 2,3-butanediol production. *Enzyme and Microbial Technology*, **2011**, 49, 413-9	3.8	57
14	Pretreatment of Siam weed stem by several chemical methods for increasing the enzymatic digestibility. *Biotechnology Journal*, **2010**, 5, 493-504	5.6	31

13	Microwave pretreatment of substrates for cellulase production by solid-state fermentation. *Applied Biochemistry and Biotechnology*, **2010**, 160, 1557-71	3.2	34
12	Chemical and thermal characteristics of lignins isolated from Siam weed stem by acetic acid and formic acid delignification. *Industrial Crops and Products*, **2010**, 32, 284-291	5.9	48
11	Biofuels Production Development and Prospects in China. *Journal of Biobased Materials and Bioenergy*, **2010**, 4, 221-242	1.4	6
10	Characterization and comparison of Acetosolv and Milox lignin isolated from crofton weed stem. *Journal of Applied Polymer Science*, **2009**, 114, 1295-1302	2.9	37
9	Organosolv pretreatment of lignocellulosic biomass for enzymatic hydrolysis. *Applied Microbiology and Biotechnology*, **2009**, 82, 815-27	5.7	814
8	Characteristics of hydrogen and methane production from cornstalks by an augmented two- or three-stage anaerobic fermentation process. *Bioresource Technology*, **2009**, 100, 2889-95	11	83
7	Enhancement of the enzymatic digestibility of sugarcane bagasse by alkali–peracetic acid pretreatment. *Enzyme and Microbial Technology*, **2009**, 44, 17-23	3.8	104
6	Peracetic acid pretreatment of sugarcane bagasse for enzymatic hydrolysis: a continued work. *Journal of Chemical Technology and Biotechnology*, **2008**, 83, 950-956	3.5	134
5	Comparative study on chemical pretreatment methods for improving enzymatic digestibility of crofton weed stem. *Bioresource Technology*, **2008**, 99, 3729-36	11	78
4	Preparation of peracetic acid from hydrogen peroxide, part II: Kinetics for spontaneous decomposition of peracetic acid in the liquid phase. *Journal of Molecular Catalysis A*, **2008**, 284, 58-68		65
3	Effect of several factors on peracetic acid pretreatment of sugarcane bagasse for enzymatic hydrolysis. *Journal of Chemical Technology and Biotechnology*, **2007**, 82, 1115-1121	3.5	110
2	Preparation of peracetic acid from hydrogen peroxide. *Journal of Molecular Catalysis A*, **2007**, 271, 246-252		103
1	Pretreatment of Rice Hulls for Cellulase Production by Solid Substrate FermentationView all notes. *Journal of Wood Chemistry and Technology*, **2007**, 27, 65-71	2	7