Xiaowen Chen

List of Publications by Citations

Source: https://exaly.com/author-pdf/1457120/xiaowen-chen-publications-by-citations.pdf
Version: 2024-04-27

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

37 papers	1,522 citations	22 h-index	39 g-index
39 ext. papers	1,801 ext. citations	8.7 avg, IF	4.51 L-index

#	Paper	IF	Citations
37	Base-Catalyzed Depolymerization of Biorefinery Lignins. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 1474-1486	8.3	125
36	DMR (deacetylation and mechanical refining) processing of corn stover achieves high monomeric sugar concentrations (230 g L1) during enzymatic hydrolysis and high ethanol concentrations (>10% v/v) during fermentation without hydrolysate purification or concentration. *Energy and Environmental Science*, **2016**, 9, 1237-1245	35.4	117
35	Noble-metal catalyzed hydrodeoxygenation of biomass-derived lignin to aromatic hydrocarbons. *Green Chemistry*, **2014**, 16, 897	10	116
34	The impacts of deacetylation prior to dilute acid pretreatment on the bioethanol process. *Biotechnology for Biofuels*, **2012**, 5, 8	7.8	114
33	Biomass-derived lignin to jet fuel range hydrocarbons via aqueous phase hydrodeoxygenation. *Green Chemistry*, **2015**, 17, 5131-5135	10	108
32	Enhanced lipid production by Rhodosporidium toruloides using different fed-batch feeding strategies with lignocellulosic hydrolysate as the sole carbon source. *Biotechnology for Biofuels*, **2016**, 9, 130	7.8	97
31	One-Pot Process for Hydrodeoxygenation of Lignin to Alkanes Using Ru-Based Bimetallic and Bifunctional Catalysts Supported on Zeolite Y. *ChemSusChem*, **2017**, 10, 1846-1856	8.3	88
30	Kinetics and mechanism of autohydrolysis of hardwoods. *Bioresource Technology*, **2010**, 101, 7812-9	11	85
29	Metabolic engineering of Zymomonas mobilis for 2,3-butanediol production from lignocellulosic biomass sugars. *Biotechnology for Biofuels*, **2016**, 9, 189	7.8	77
28	A highly efficient dilute alkali deacetylation and mechanical (disc) refining process for the conversion of renewable biomass to lower cost sugars. *Biotechnology for Biofuels*, **2014**, 7, 98	7.8	67
27	Comparison of different mechanical refining technologies on the enzymatic digestibility of low severity acid pretreated corn stover. *Bioresource Technology*, **2013**, 147, 401-408	11	53
26	Improved ethanol yield and reduced Minimum Ethanol Selling Price (MESP) by modifying low severity dilute acid pretreatment with deacetylation and mechanical refining: 1) Experimental. *Biotechnology for Biofuels*, **2012**, 5, 60	7.8	50
25	Effect of mechanical disruption on the effectiveness of three reactors used for dilute acid pretreatment of corn stover Part 2: morphological and structural substrate analysis. *Biotechnology for Biofuels*, **2014**, 7, 47	7.8	48
24	Improved Xylan Hydrolysis of Corn Stover by Deacetylation with High Solids Dilute Acid Pretreatment. *Industrial & Engineering Chemistry Research*, **2012**, 51, 70-76	3.9	38
23	Effect of mechanical disruption on the effectiveness of three reactors used for dilute acid pretreatment of corn stover Part 1: chemical and physical substrate analysis. *Biotechnology for Biofuels*, **2014**, 7, 57	7.8	37
22	Use of mechanical refining to improve the production of low-cost sugars from lignocellulosic biomass. *Bioresource Technology*, **2016**, 199, 59-67	11	35
21	Peracetic Acid Depolymerization of Biorefinery Lignin for Production of Selective Monomeric Phenolic Compounds. *Chemistry - A European Journal*, **2016**, 22, 10884-91	4.8	31

20	Heterologous expression of xylanase enzymes in lipogenic yeast Yarrowia lipolytica. *PLoS ONE*, **2014**, 9, e111443	3.7	29
19	Improving Sugar Yields and Reducing Enzyme Loadings in the Deacetylation and Mechanical Refining (DMR) Process through Multistage Disk and Szego Refining and Corresponding Techno-Economic Analysis. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 324-333	8.3	28
18	Effect of pelleting on the recalcitrance and bioconversion of dilute-acid pretreated corn stover under low- and high-solids conditions. *Biofuels*, **2013**, 4, 271-284	2	28
17	Techno-economic analysis of the deacetylation and disk refining process: characterizing the effect of refining energy and enzyme usage on minimum sugar selling price and minimum ethanol selling price. *Biotechnology for Biofuels*, **2015**, 8, 173	7.8	26
16	Sweet sorghum bagasse and corn stover serving as substrates for producing sophorolipids. *Journal of Industrial Microbiology and Biotechnology*, **2017**, 44, 353-362	4.2	25
15	Microbial electrochemical treatment of biorefinery black liquor and resource recovery. *Green Chemistry*, **2019**, 21, 1258-1266	10	21
14	Electrical decoupling of microbial electrochemical reactions enables spontaneous H2 evolution. *Energy and Environmental Science*, **2020**, 13, 495-502	35.4	13
13	Kinetic Modelling and Experimental Studies for the Effects of Fe2+ Ions on Xylan Hydrolysis with Dilute-Acid Pretreatment and Subsequent Enzymatic Hydrolysis. *Catalysts*, **2018**, 8, 39	4	12
12	Deep Eutectic Solvent Extraction of High-Purity Lignin from a Corn Stover Hydrolysate. *ChemSusChem*, **2020**, 13, 4678-4690	8.3	12
11	Simultaneous upgrading of biomass-derived sugars to HMF/furfural via enzymatically isomerized ketose intermediates. *Biotechnology for Biofuels*, **2019**, 12, 253	7.8	11
10	Kinetics and Rheological Behavior of Higher Solid (Solids >20%) Enzymatic Hydrolysis Reactions Using Dilute Acid Pretreated, Deacetylation and Disk Refined, and Deacetylation and Mechanical Refined (DMR) Corn Stover Slurries. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 1633-1641	8.3	8
9	Deacetylation and Mechanical Refining (DMR) and Deacetylation and Dilute Acid (DDA) Pretreatment of Corn Stover, Switchgrass, and a 50:50 Corn Stover/Switchgrass Blend. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 6734-6743	8.3	6
8	Antimicrobial Properties of Corn Stover Lignin Fractions Derived from Catalytic Transfer Hydrogenolysis in Supercritical Ethanol with a Ru/C Catalyst. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 18455-18467	8.3	3
7	Ferrous and Ferric Ion-Facilitated Dilute Acid Pretreatment of Lignocellulosic Biomass under Anaerobic or Aerobic Conditions: Observations of Fe Valence Interchange and the Role of Fenton Reaction. *Molecules*, **2020**, 25,	4.8	2
6	Conversion of corn stover hydrolysates to acids: comparison between Clostridium carboxidivorans P7 and microbial communities developed from lake sediment and an anaerobic digester. *Biomass Conversion and Biorefinery*, **2018**, 8, 169-178	2.3	2
5	Modeling the Disc Refining of Lignocellulosic Biomass toward Reduced Biofuel Production Cost and Greenhouse Gas Emissions: Energy Consumption Prediction and Validation. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 9717-9726	8.3	1
4	Role of peracetic acid on the disruption of lignin packing structure and its consequence on lignin depolymerisation. *Green Chemistry*,	10	1
3	Controlling bacterial contamination during fuel ethanol fermentation using thermochemically depolymerized lignin bio-oils. *Green Chemistry*, **2021**, 23, 6477-6489	10	0

2	Disruption of the Gene Enhances Cell Growth and Reduces the Metabolic Burden in Cellulase-Expressing and Lipid-Accumulating .. *Frontiers in Microbiology*, **2021**, 12, 757741	5.7	0
1	Iron incorporation both intra- and extra-cellularly improves the yield and saccharification of switchgrass (Panicum virgatum L.) biomass. *Biotechnology for Biofuels*, **2021**, 14, 55	7.8	