Richard P Chandra

List of Publications by Year
in descending order

47 papers	6,166 citations	196777 29 h-index	252626 46 g-index
47 all docs	47 docs citations	47 times ranked	7027 citing authors

#	Article	IF	Citations
1	Sulphite addition during steam pretreatment enhanced both enzyme-mediated cellulose hydrolysis and ethanol production. Bioresources and Bioprocessing, 2022, 9, .	2.0	5
2	The production of lactic acid from chemi-thermomechanical pulps using a chemo-catalytic approach. Bioresource Technology, 2021, 324, 124664.	4.8	12
3	Enhancing Kraft based dissolving pulp production by integrating green liquor neutralization. Carbohydrate Polymer Technologies and Applications, 2021, 2, 100034.	1.6	2
4	Non-productive celluase binding onto deep eutectic solvent (DES) extracted lignin from willow and corn stover with inhibitory effects on enzymatic hydrolysis of cellulose. Carbohydrate Polymers, 2020, 250, 116956.	5.1	58
5	Alkaline sulfonation and thermomechanical pulping pretreatment of softwood chips and pellets to enhance enzymatic hydrolysis. Bioresource Technology, 2020, 315, 123789.	4.8	23
6	Enhancing Enzyme-Mediated Cellulose Hydrolysis by Incorporating Acid Groups Onto the Lignin During Biomass Pretreatment. Frontiers in Bioengineering and Biotechnology, 2020, 8, 608835.	2.0	8
7	Enzyme-Mediated Lignocellulose Liquefaction Is Highly Substrate-Specific and Influenced by the Substrate Concentration or Rheological Regime. Frontiers in Bioengineering and Biotechnology, 2020, 8, 917.	2.0	4
8	Enhancing Enzyme-Mediated Hydrolysis of Mechanical Pulps by Deacetylation and Delignification. ACS Sustainable Chemistry and Engineering, 2020, 8, 5847-5855.	3.2	13
9	Substrate Characteristics That Influence the Filter Paper Assayâ€™s Ability to Predict the Hydrolytic Potential of Cellulase Mixtures. ACS Sustainable Chemistry and Engineering, 2020, 8, 10521-10528.	3.2	10
10	Valorization of Bark Using Ethanolâ€"Water Organosolv Treatment: Isolation and Characterization of Crude Lignin. ACS Sustainable Chemistry and Engineering, 2020, 8, 4745-4754.	3.2	25
11	The influence of lignin on the effectiveness of using a chemithermomechanical pulping based process to pretreat softwood chips and pellets prior to enzymatic hydrolysis. Bioresource Technology, 2020, 302, 122895.	4.8	41
12	The influence of lignin migration and relocation during steam pretreatment on the enzymatic hydrolysis of softwood and corn stover biomass substrates. Biotechnology and Bioengineering, 2019, 116, 2864-2873.	1.7	42
13	Laccase-mediated hydrophilization of lignin decreases unproductive enzyme binding but limits subsequent enzymatic hydrolysis at high substrate concentrations. Bioresource Technology, 2019, 292, 121999.	4.8	11
14	Alkaliâ€"oxygen treatment prior to the mechanical pulping of hardwood enhances enzymatic hydrolysis and carbohydrate recovery through selective lignin modification. Sustainable Energy and Fuels, 2019, 3, 227-236.	2.5	31
15	Sulfite Post-Treatment To Simultaneously Detoxify and Improve the Enzymatic Hydrolysis and Fermentation of a Steam-Pretreated Softwood Lodgepole Pine Whole Slurry. ACS Sustainable Chemistry and Engineering, 2019, 7, 5192-5199.	3.2	23
16	The Application of Fiber Quality Analysis (FQA) and Cellulose Accessibility Measurements To Better Elucidate the Impact of Fiber Curls and Kinks on the Enzymatic Hydrolysis of Fibers. ACS Sustainable Chemistry and Engineering, 2019, 7, 8827-8833.	3.2	15
17	Comparing a deep eutectic solvent (DES) to a hydrotrope for their ability to enhance the fractionation and enzymatic hydrolysis of willow and corn stover. Sustainable Energy and Fuels, 2019, 3, 1329-1337.	2.5	45
18	From biorefineries to bioproducts: conversion of pretreated pulp from biorefining streams to lignocellulose nanofibers. Tappi Journal, 2019, 18, 233-241.	0.2	0

#	ARTICLE	IF	CITATIONS
19	The Role of Biomass Composition and Steam Treatment on Durability of Pellets. Bioenergy Research, 2018, 11, 341-350.	2.2	19
20	Steam explosion pretreatment used to remove hemicellulose to enhance the production of a eucalyptus organosolv dissolving pulp. Wood Science and Technology, 2017, 51, 557-569.	1.4	28
21	Valorizing Recalcitrant Cellulolytic Enzyme Lignin via Lignin Nanoparticles Fabrication in an Integrated Biorefinery. ACS Sustainable Chemistry and Engineering, 2017, 5, 2702-2710.	3.2	115
22	Alkali-Oxygen Impregnation Prior to Steam Pretreating Poplar Wood Chips Enhances Selective Lignin Modification and Removal while Maximizing Carbohydrate Recovery, Cellulose Accessibility, and Enzymatic Hydrolysis. ACS Sustainable Chemistry and Engineering, 2017, 5, 4011-4017.	3.2	33
23	Lignin valorization: lignin nanoparticles as high-value bio-additive for multifunctional nanocomposites. Biotechnology for Biofuels, 2017, 10, 192.	6.2	228
24	Off-Gassing of VOCs and Permanent Gases during Storage of Torrefied and Steam Exploded Wood. Energy & Fuels, 2017, 31, 10954-10965.	2.5	10
25	A comparison of various lignin-extraction methods to enhance the accessibility and ease of enzymatic hydrolysis of the cellulosic component of steam-pretreated poplar. Biotechnology for Biofuels, 2017, 10, 157.	6.2	124
26	The influence of lignin on steam pretreatment and mechanical pulping of poplar to achieve high sugar recovery and ease of enzymatic hydrolysis. Bioresource Technology, 2016, 199, 135-141.	4.8	87
27	Steam pretreatment of agricultural residues facilitates hemicellulose recovery while enhancing enzyme accessibility to cellulose. Bioresource Technology, 2015, 185, 302-307.	4.8	45
28	Enhancing Hemicellulose Recovery and the Enzymatic Hydrolysis of Cellulose by Adding Lignosulfonates during the Two-Stage Steam Pretreatment of Poplar. ACS Sustainable Chemistry and Engineering, 2015, 3, 986-991.	3.2	44
29	The addition of accessory enzymes enhances the hydrolytic performance of cellulase enzymes at high solid loadings. Bioresource Technology, 2015, 186, 149-153.	4.8	150
30	Second-generation ethanol in Chile: optimisation of the autohydrolysis of Eucalyptus globulus. Biomass Conversion and Biorefinery, 2014, 4, 125-135.	2.9	8
31	Lignin Valorization: Improving Lignin Processing in the Biorefinery. Science, 2014, 344, 1246843.	6.0	2,994
32	How effective are traditional methods of compositional analysis in providing an accurate material balance for a range of softwood derived residues?. Biotechnology for Biofuels, 2013, 6, 90.	6.2	35
33	Use of the Simons' Staining Technique to Assess Cellulose Accessibility in Pretreated Substrates. Industrial Biotechnology, 2012, 8, 230-237.	0.5	56
34	The lignin present in steam pretreated softwood binds enzymes and limits cellulose accessibility. Bioresource Technology, 2012, 103, 201-208.	4.8	340
35	Fibre size does not appear to influence the ease of enzymatic hydrolysis of organosolv-pretreated softwoods. Bioresource Technology, 2012, 107, 235-242.	4.8	46
36	The influence of pretreatment and enzyme loading on the effectiveness of batch and fedâ€batch hydrolysis of corn stover. Biotechnology Progress, 2011, 27, 77-85.	1.3	34

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37	Enhancing the enzymatic hydrolysis of lignocellulosic biomass by increasing the carboxylic acid content of the associated lignin. Biotechnology and Bioengineering, 2011, 108, 538-548.	1.7	211
38	The effects of increasing swelling and anionic charges on the enzymatic hydrolysis of organosolvâ€pretreated softwoods at low enzyme loadings. Biotechnology and Bioengineering, 2011, 108, 1549-1558.	1.7	47
39	Influence of steam pretreatment severity on postâ€treatments used to enhance the enzymatic hydrolysis of pretreated softwoods at low enzyme loadings. Biotechnology and Bioengineering, 2011, 108, 2300-2311.	1.7	103
40	The isolation, characterization and effect of lignin isolated from steam pretreated Douglas-fir on the enzymatic hydrolysis of cellulose. Bioresource Technology, 2011, 102, 4507-4517.	4.8	200
41	The effect of isolated lignins, obtained from a range of pretreated lignocellulosic substrates, on enzymatic hydrolysis. Biotechnology and Bioengineering, 2010, 105, 871-879.	1.7	206
42	Can the same steam pretreatment conditions be used for most softwoods to achieve good, enzymatic hydrolysis and sugar yields?. Bioresource Technology, 2010, 101, 7827-7833.	4.8	84
43	Influence of xylan on the enzymatic hydrolysis of steamâ€pretreated corn stover and hybrid poplar. Biotechnology Progress, 2009, 25, 315-322.	1.3	153
44	Comparison of methods to assess the enzyme accessibility and hydrolysis of pretreated lignocellulosic substrates. Biotechnology Letters, 2009, 31, 1217-1222.	1.1	67
45	The characterization of pretreated lignocellulosic substrates prior to enzymatic hydrolysis, part 1: A modified Simons' staining technique. Biotechnology Progress, 2008, 24, 1178-1185.	1.3	164
46	Evaluating the Distribution of Cellulases and the Recycling of Free Cellulases during the Hydrolysis of Lignocellulosic Substrates. Biotechnology Progress, 2007, 23, 398-406.	1.3	163
47	The Effects of Treatment with the White-Rot Fungus<i>Trametes Versicolor</i>and Laccase Enzymes on the Brightness of Douglas-Fir Heartwood Derived Thermomechanical Pulps. Journal of Wood Chemistry and Technology, 1999, 19, 61-78.	0.9	4