Bin Yang

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/7988480/publications.pdf

Version: 2024-02-01

88 papers	8,974 citations	46 h-index (50276)	87 g-index (49909)
95 all docs	95 docs citations	95 times ranked	7809 citing authors

#	Article	IF	Citations
1	Pretreatment: the key to unlocking lowâ€cost cellulosic ethanol. Biofuels, Bioproducts and Biorefining, 2008, 2, 26-40.	3.7	1,247
2	Effect of xylan and lignin removal by batch and flowthrough pretreatment on the enzymatic digestibility of corn stover cellulose. Biotechnology and Bioengineering, 2004, 86, 88-98.	3.3	598
3	From lignin to valuable productsâ€"strategies, challenges, and prospects. Bioresource Technology, 2019, 271, 449-461.	9.6	565
4	Xylooligomers are strong inhibitors of cellulose hydrolysis by enzymes. Bioresource Technology, 2010, 101, 9624-9630.	9.6	459
5	Enzymatic hydrolysis of cellulosic biomass. Biofuels, 2011, 2, 421-449.	2.4	450
6	BSA treatment to enhance enzymatic hydrolysis of cellulose in lignin containing substrates. Biotechnology and Bioengineering, 2006, 94, 611-617.	3.3	438
7	Process and technoeconomic analysis of leading pretreatment technologies for lignocellulosic ethanol production using switchgrass. Bioresource Technology, 2011, 102, 11105-11114.	9.6	274
8	Cellulase Adsorption and an Evaluation of Enzyme Recycle During Hydrolysis of Steam-Exploded Softwood Residues. Applied Biochemistry and Biotechnology, 2002, 98-100, 641-654.	2.9	196
9	Controlling Porosity in Ligninâ€Derived Nanoporous Carbon for Supercapacitor Applications. ChemSusChem, 2015, 8, 428-432.	6.8	196
10	Impact of surfactants on pretreatment of corn stover. Bioresource Technology, 2010, 101, 5941-5951.	9.6	182
11	Pathways for biomassâ€derived lignin to hydrocarbon fuels. Biofuels, Bioproducts and Biorefining, 2013, 7, 602-626.	3.7	169
12	Depolymerization of lignocellulosic biomass to fuel precursors: maximizing carbon efficiency by combining hydrolysis with pyrolysis. Energy and Environmental Science, 2010, 3, 358.	30.8	157
13	Changes in the enzymatic hydrolysis rate of Avicel cellulose with conversion. Biotechnology and Bioengineering, 2006, 94, 1122-1128.	3.3	141
14	Noble-metal catalyzed hydrodeoxygenation of biomass-derived lignin to aromatic hydrocarbons. Green Chemistry, 2014, 16, 897.	9.0	141
15	Biomass-derived lignin to jet fuel range hydrocarbons via aqueous phase hydrodeoxygenation. Green Chemistry, 2015, 17, 5131-5135.	9.0	141
16	Fast and efficient alkaline peroxide treatment to enhance the enzymatic digestibility of steam-exploded softwood substrates. Biotechnology and Bioengineering, 2002, 77, 678-684.	3.3	138
17	Lignin valorization: Status, challenges and opportunities. Bioresource Technology, 2022, 347, 126696.	9.6	136
18	Biodegradation of alkaline lignin by Bacillus ligniniphilus L1. Biotechnology for Biofuels, 2017, 10, 44.	6.2	129

#	Article	IF	Citations
19	Oneâ€Pot Process for Hydrodeoxygenation of Lignin to Alkanes Using Ruâ€Based Bimetallic and Bifunctional Catalysts Supported on Zeolite Y. ChemSusChem, 2017, 10, 1846-1856.	6.8	127
20	Comparative material balances around pretreatment technologies for the conversion of switchgrass to soluble sugars. Bioresource Technology, 2011, 102, 11063-11071.	9.6	117
21	Identifying and creating pathways to improve biological lignin valorization. Renewable and Sustainable Energy Reviews, 2019, 105, 349-362.	16.4	116
22	Strengths, challenges, and opportunities for hydrothermal pretreatment in lignocellulosic biorefineries. Biofuels, Bioproducts and Biorefining, 2018, 12, 125-138.	3.7	111
23	Lipid Production from Dilute Alkali Corn Stover Lignin by <i>Rhodococcus</i> Strains. ACS Sustainable Chemistry and Engineering, 2017, 5, 2302-2311.	6.7	101
24	Catalytic routes for the conversion of lignocellulosic biomass to aviation fuel range hydrocarbons. Renewable and Sustainable Energy Reviews, 2020, 120, 109612.	16.4	97
25	Comparative study on enzymatic digestibility of switchgrass varieties and harvests processed by leading pretreatment technologies. Bioresource Technology, 2011, 102, 11089-11096.	9.6	93
26	Effects of Lignin Structure on Hydrodeoxygenation Reactivity of Pine Wood Lignin to Valuable Chemicals. ACS Sustainable Chemistry and Engineering, 2017, 5, 1824-1830.	6.7	90
27	Production of Jet Fuelâ€Range Hydrocarbons from Hydrodeoxygenation of Lignin over Super Lewis Acid Combined with Metal Catalysts. ChemSusChem, 2018, 11, 285-291.	6.8	88
28	Characterization of lignin derived from water-only and dilute acid flowthrough pretreatment of poplar wood at elevated temperatures. Biotechnology for Biofuels, 2015, 8, 203.	6.2	86
29	Characterization of the degree of polymerization of xylooligomers produced by flowthrough hydrolysis of pure xylan and corn stover with water. Bioresource Technology, 2008, 99, 5756-5762.	9.6	85
30	Severity factor kinetic model as a strategic parameter of hydrothermal processing (steam explosion) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 2021, 342, 125961.	9.6	83
31	The effect of shaking regime on the rate and extent of enzymatic hydrolysis of cellulose. Journal of Biotechnology, 2001, 88, 177-182.	3.8	79
32	ZnCl₂ induced catalytic conversion of softwood lignin to aromatics and hydrocarbons. Green Chemistry, 2016, 18, 2802-2810.	9.0	76
33	Ligninâ€derived electrochemical energy materials and systems. Biofuels, Bioproducts and Biorefining, 2020, 14, 650-672.	3.7	73
34	Transforming biorefinery designs with â€˜Plug-In Processes of Ligninâ€™ to enable economic waste valorization. Nature Communications, 2021, 12, 3912.	12.8	71
35	A comprehensive mechanistic kinetic model for dilute acid hydrolysis of switchgrass cellulose to glucose, 5-HMF and levulinic acid. RSC Advances, 2014, 4, 23492.	3.6	70
36	Enhancement of enzymatic saccharification of corn stover with sequential Fenton pretreatment and dilute NaOH extraction. Bioresource Technology, 2015, 193, 324-330.	9.6	70

#	Article	IF	Citations
37	Discovery of potential pathways for biological conversion of poplar wood into lipids by co-fermentation of Rhodococci strains. Biotechnology for Biofuels, 2019, 12, 60.	6.2	69
38	Technoâ€economic analysis of jetâ€fuel production from biorefinery waste lignin. Biofuels, Bioproducts and Biorefining, 2019, 13, 486-501.	3.7	67
39	Surface and ultrastructural characterization of raw and pretreated switchgrass. Bioresource Technology, 2011, 102, 11097-11104.	9.6	62
40	The effect of bovine serum albumin on batch and continuous enzymatic cellulose hydrolysis mixed by stirring or shaking. Bioresource Technology, 2011, 102, 6295-6298.	9.6	56
41	Catalytic hydrodeoxygenation of anisole: an insight into the role of metals in transalkylation reactions in bio-oil upgrading. Green Chemistry, 2017, 19, 1668-1673.	9.0	55
42	Application of cellulase and hemicellulase to pure xylan, pure cellulose, and switchgrass solids from leading pretreatments. Bioresource Technology, 2011, 102, 11080-11088.	9.6	54
43	Comparison of microwaves to fluidized sand baths for heating tubular reactors for hydrothermal and dilute acid batch pretreatment of corn stover. Bioresource Technology, 2011, 102, 5952-5961.	9.6	54
44	Cultivar variation and selection potential relevant to the production of cellulosic ethanol from wheat straw. Biomass and Bioenergy, 2012, 37, 221-228.	5.7	54
45	Simultaneous conversion of all cell wall components by an oleaginous fungus without chemi-physical pretreatment. Green Chemistry, 2015, 17, 1657-1667.	9.0	53
46	Insight into Depolymerization Mechanism of Bacterial Laccase for Lignin. ACS Sustainable Chemistry and Engineering, 2020, 8, 12920-12933.	6.7	53
47	Enhancement of total sugar and lignin yields through dissolution of poplar wood by hot water and dilute acid flowthrough pretreatment. Biotechnology for Biofuels, 2014, 7, 76.	6.2	46
48	Characterization of lignin derived from water-only flowthrough pretreatment of Miscanthus. Industrial Crops and Products, 2013, 50, 391-399.	5.2	45
49	Rapid selection and identification of Miscanthus genotypes with enhanced glucan and xylan yields from hydrothermal pretreatment followed by enzymatic hydrolysis. Biotechnology for Biofuels, 2012, 5, 56.	6.2	43
50	Enzymatic in situ saccharification of chestnut shell with high ionic liquid-tolerant cellulases from Galactomyces sp. CCZU11-1 in a biocompatible ionic liquid-cellulase media. Bioresource Technology, 2016, 201, 133-139.	9.6	42
51	Biological conversion of the aqueous wastes from hydrothermal liquefaction of algae and pine wood by Rhodococci. Bioresource Technology, 2017, 224, 457-464.	9.6	41
52	Dilute Acid and Autohydrolysis Pretreatment. Methods in Molecular Biology, 2009, 581, 103-114.	0.9	39
53	Genomics and biochemistry investigation on the metabolic pathway of milled wood and alkali lignin-derived aromatic metabolites of Comamonas serinivorans SP-35. Biotechnology for Biofuels, 2018, 11, 338.	6.2	39
54	Depolymerization of corn stover lignin with bulk molybdenum carbide catalysts. Fuel, 2019, 244, 528-535.	6.4	39

#	Article	IF	Citations
55	An effective hybrid strategy for converting rice straw to furoic acid by tandem catalysisviaSn-sepiolite combined with recombinantE. coliwhole cells harboring horse liver alcohol dehydrogenase. Green Chemistry, 2019, 21, 5914-5923.	9.0	39
56	Revealing the Molecular Structural Transformation of Hardwood and Softwood in Dilute Acid Flowthrough Pretreatment. ACS Sustainable Chemistry and Engineering, 2016, 4, 6618-6628.	6.7	38
57	Kinetic understanding of nitrogen supply condition on biosynthesis of polyhydroxyalkanoate from benzoate by Pseudomonas putida KT2440. Bioresource Technology, 2019, 273, 538-544.	9.6	32
58	Effects of Sugars, Furans, and their Derivatives on Hydrodeoxygenation of Biorefinery Ligninâ€Rich Wastes to Hydrocarbons. ChemSusChem, 2018, 11, 2562-2568.	6.8	30
59	In Situ Transmission Electron Microscopy Studies of Electrochemical Reaction Mechanisms in Rechargeable Batteries. Electrochemical Energy Reviews, 2019, 2, 467-491.	25.5	30
60	Enhancement of polyhydroxyalkanoate production by co-feeding lignin derivatives with glycerol in Pseudomonas putida KT2440. Biotechnology for Biofuels, 2021, 14, 11.	6.2	28
61	Unconventional Relationships for Hemicellulose Hydrolysis and Subsequent Cellulose Digestion. ACS Symposium Series, 2004, , 100-125.	0.5	27
62	Aqueous phase catalytic conversion of agarose to 5-hydroxymethylfurfural by metal chlorides. RSC Advances, 2013, 3, 24090.	3.6	27
63	Mass spectrometry-based direct detection of multiple types of protein thiol modifications in pancreatic beta cells under endoplasmic reticulum stress. Redox Biology, 2021, 46, 102111.	9.0	27
64	The promise of cellulosic ethanol production in China. Journal of Chemical Technology and Biotechnology, 2007, 82, 6-10.	3.2	26
65	Physiochemical Characterization of Lignocellulosic Biomass Dissolution by Flowthrough Pretreatment. ACS Sustainable Chemistry and Engineering, 2016, 4, 219-227.	6.7	25
66	Decoding lignin valorization pathways in the extremophilic<i>Bacillus ligniniphilus</i>L1 for vanillin biosynthesis. Green Chemistry, 2021, 23, 9554-9570.	9.0	25
67	Extremophiles and extremozymes in lignin bioprocessing. Renewable and Sustainable Energy Reviews, 2022, 157, 112069.	16.4	25
68	Dynamic changes of substrate reactivity and enzyme adsorption on partially hydrolyzed cellulose. Biotechnology and Bioengineering, 2017, 114, 503-515.	3.3	24
69	Near Infrared Spectroscopy as a Screening Tool for Sugar Release and Chemical Composition of Wheat Straw. Journal of Biobased Materials and Bioenergy, 2010, 4, 378-383.	0.3	23
70	Investigation of enzyme formulation on pretreated switchgrass. Bioresource Technology, 2011, 102, 11072-11079.	9.6	21
71	Vibrational spectral signatures of crystalline cellulose using high resolution broadband sum frequency generation vibrational spectroscopy (HR-BB-SFG-VS). Cellulose, 2015, 22, 1469-1484.	4.9	17
72	Selecting winter wheat straw for cellulosic ethanol production in the Pacific Northwest, U.S.A. Biomass and Bioenergy, 2019, 123, 59-69.	5.7	16

#	Article	IF	Citations
73	Cellulosic biomass could help meet California's transportation fuel needs. California Agriculture, 2009, 63, 185-190.	0.8	16
74	Chemical compositions and properties of lignin-based jet fuel range hydrocarbons. Fuel, 2019, 256, 115947.	6.4	15
75	Combined Severity Factor for Predicting Sugar Recovery in Acid-Catalyzed Pretreatment Followed by Enzymatic Hydrolysis. , 2017, , 161-180.		15
76	Tuning of oxygen species and active Pd2+ species of supported catalysts via morphology and Mn doping in oxidative carbonylation of phenol. Molecular Catalysis, 2018, 457, 1-7.	2.0	14
77	Intraspecific Variation and Phylogenetic Relationships Are Revealed by ITS1 Secondary Structure Analysis and Single-Nucleotide Polymorphism in Ganoderma lucidum. PLoS ONE, 2017, 12, e0169042.	2.5	14
78	Lignin-based jet fuel and its blending effect with conventional jet fuel. Fuel, 2022, 321, 124040.	6.4	13
79	Facile One-Pot Nanoproteomics for Label-Free Proteome Profiling of 50â€“1000 Mammalian Cells. Journal of Proteome Research, 2021, 20, 4452-4461.	3.7	12
80	First principles density functional theory study of Pb doped Î±-MnO2 catalytic materials. Chemical Physics Letters, 2018, 695, 216-221.	2.6	11
81	Discovery of Cellulose Surface Layer Conformation by Nonlinear Vibrational Spectroscopy. Scientific Reports, 2017, 7, 44319.	3.3	9
82	High Catalytic Efficiency of Lignin Depolymerization over Low Pd-Zeolite Y Loading at Mild Temperature. Frontiers in Energy Research, 2018, 6, .	2.3	9
83	Controlling Porosity in Ligninâ€Derived Nanoporous Carbon for Supercapacitor Applications. ChemSusChem, 2015, 8, 411-411.	6.8	7
84	Flowthrough Pretreatment of Softwood under Water-Only and Alkali Conditions. Energy & Fuels, 2020, 34, 16310-16319.	5.1	7
85	Lipid production from non-sugar compounds in pretreated lignocellulose hydrolysates by Rhodococcus jostii RHA1. Biomass and Bioenergy, 2021, 145, 105970.	5.7	6
86	Pretreatment Process and Its Synergistic Effects on Enzymatic Digestion of Lignocellulosic Material. , 2018, , 1-25.		4
87	Proteomic Approaches for Advancing the Understanding and Application of Oleaginous Bacteria for Bioconversion of Lignin to Lipids. ACS Symposium Series, 2021, , 61-96.	0.5	3
88	Cover Image, Volume 14, Issue 3. Biofuels, Bioproducts and Biorefining, 2020, 14, i.	3.7	0