Blake Alexander Simmons

List of Publications by Year
in descending order

400 papers	27,621 citations	5248 83 h-index	8835 145 g-index
420 all docs	420 docs citations	420 times ranked	26998 citing authors

#	Article	IF	Citations
1	Review of advances in the development of laccases for the valorization of lignin to enable the production of lignocellulosic biofuels and bioproducts. Biotechnology Advances, 2022, 54, 107809.	6.0	50
2	Cooperative BrÃ¸nsted-Lewis acid sites created by phosphotungstic acid encapsulated metalâ€“organic frameworks for selective glucose conversion to 5-hydroxymethylfurfural. Fuel, 2022, 310, 122459.	3.4	28
3	Prediction of solubility parameters of lignin and ionic liquids using multi-resolution simulation approaches. Green Chemistry, 2022, 24, 1165-1176.	4.6	30
4	Depolymerization of lignin for biological conversion through sulfonation and a chelator-mediated Fenton reaction. Green Chemistry, 2022, 24, 1627-1643.	4.6	6
5	One-pot ethanol production under optimized pretreatment conditions using agave bagasse at high solids loading with low-cost biocompatible protic ionic liquid. Green Chemistry, 2022, 24, 207-217.	4.6	13
6	A new platform for ultra-high dose rate radiobiological research using the BELLA PW laser proton beamline. Scientific Reports, 2022, 12, 1484.	1.6	23
7	Scale-Up of the Ionic Liquid-Based Biomass Conversion Processes. , 2022, , 1-8.		0
8	Comparative Study on the Pretreatment of Aspen and Maple With 1-Ethyl-3-methylimidazolium Acetate and Cholinium Lysinate. Frontiers in Energy Research, 2022, 10, .	1.2	3
9	Complete Genome Sequences of Five Isolated Pseudomonas Strains that Catabolize Pentose Sugars and Aromatic Compounds Obtained from Lignocellulosic Biomass. Microbiology Resource Announcements, 2022, 11, e0098721.	0.3	4
10	<i>In silico</i> COSMO-RS predictive screening of ionic liquids for the dissolution of plastic. Green Chemistry, 2022, 24, 4140-4152.	4.6	33
11	Machine learning for metabolic engineering: A review. Metabolic Engineering, 2021, 63, 34-60.	3.6	135
12	Towards understanding of delignification of grassy and woody biomass in cholinium-based ionic liquids. Green Chemistry, 2021, 23, 6020-6035.	4.6	22
13	Integration of acetic acid catalysis with one-pot protic ionic liquid configuration to achieve high-efficient biorefinery of poplar biomass. Green Chemistry, 2021, 23, 6036-6049.	4.6	29
14	Liquid nanostructure of choline lysinate with water and a model lignin residue. Green Chemistry, 2021, 23, 856-866.	4.6	13
15	A predictive toolset for the identification of effective lignocellulosic pretreatment solvents: a case study of solvents tailored for lignin extraction. Green Chemistry, 2021, 23, 7269-7289.	4.6	22
16	Liquid Nanostructure of Cholinium Argininate Biomass Solvents. ACS Sustainable Chemistry and Engineering, 2021, 9, 2880-2890.	3.2	11
17	Seawater-based one-pot ionic liquid pretreatment of sorghum for jet fuel production. Bioresource Technology Reports, 2021, 13, 100622.	1.5	6
18	Can Multiple Ions in an Ionic Liquid Improve the Biomass Pretreatment Efficacy?. ACS Sustainable Chemistry and Engineering, 2021, 9, 4371-4376.	3.2	15

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19	Deconstruction of Woody Biomass via Protic and Aprotic Ionic Liquid Pretreatment for Ethanol Production. ACS Sustainable Chemistry and Engineering, 2021, 9, 4422-4432.	3.2	34
20	High-Efficiency Conversion of Ionic Liquid-Pretreated Woody Biomass to Ethanol at the Pilot Scale. ACS Sustainable Chemistry and Engineering, 2021, 9, 4042-4053.	3.2	40
21	Engineering Saccharomyces cerevisiae for isoprenol production. Metabolic Engineering, 2021, 64, 154-166.	3.6	34
22	Experimental and theoretical insights into the effects of pH on catalysis of bond-cleavage by the lignin peroxidase isozyme H8 from Phanerochaete chrysosporium. Biotechnology for Biofuels, 2021, 14, 108.	6.2	10
23	Pests, diseases, and aridity have shaped the genome of Corymbia citriodora. Communications Biology, 2021, 4, 537.	2.0	21
24	Development of dualâ€inducible duetâ€expression vectors for tunable gene expression control and CRISPR interferenceâ€based gene repression in PseudomonasÂputida KT2440. Microbial Biotechnology, 2021, 14, 2659-2678.	2.0	10
25	A multiplexed nanostructure-initiator mass spectrometry (NIMS) assay for simultaneously detecting glycosyl hydrolase and lignin modifying enzyme activities. Scientific Reports, 2021, 11, 11803.	1.6	7
26	The F-box protein gene <i>exo</i> - <i>1</i> is a target for reverse engineering enzyme hypersecretion in filamentous fungi. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	13
27	Plant single-cell solutions for energy and the environment. Communications Biology, 2021, 4, 962.	2.0	23
28	Generation of <i>Pseudomonas putida</i> KT2440 Strains with Efficient Utilization of Xylose and Galactose via Adaptive Laboratory Evolution. ACS Sustainable Chemistry and Engineering, 2021, 9, 11512-11523.	3.2	32
29	Production Cost and Carbon Footprint of Biomass-Derived Dimethylcyclooctane as a High-Performance Jet Fuel Blendstock. ACS Sustainable Chemistry and Engineering, 2021, 9, 11872-11882.	3.2	21
30	Evaluation of bacterial hosts for conversion of lignin-derived p-coumaric acid to 4-vinylphenol. Microbial Cell Factories, 2021, 20, 181.	1.9	9
31	Bacterial diversity dynamics in microbial consortia selected for lignin utilization. PLoS ONE, 2021, 16, e0255083.	1.1	11
32	Ionic liquid-water mixtures enhance pretreatment and anaerobic digestion of agave bagasse. Industrial Crops and Products, 2021, 171, 113924.	2.5	8
33	Use of ensiled biomass sorghum increases ionic liquid pretreatment efficiency and reduces biofuel production cost and carbon footprint. Green Chemistry, 2021, 23, 3127-3140.	4.6	37
34	Alkanolamines as Dual Functional Solvents for Biomass Deconstruction and Bioenergy Production. Green Chemistry, 2021, 23, 8611-8631.	4.6	8
35	Overexpression of the rice BAHD acyltransferase AT10 increases xylan-bound p-coumarate and reduces lignin in Sorghum bicolor. Biotechnology for Biofuels, 2021, 14, 217.	6.2	16
36	Genomics Characterization of an Engineered Corynebacterium glutamicum in Bioreactor Cultivation Under Ionic Liquid Stress. Frontiers in Bioengineering and Biotechnology, 2021, 9, 766674.	2.0	6

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37	Effect of ionic liquid on sugar-aromatic separation selectivity by metal-organic framework NU-1000 in aqueous solution. Fuel Processing Technology, 2020, 197, 106189.	3.7	4
38	Enhanced Softwood Cellulose Accessibility by H3PO4 Pretreatment: High Sugar Yield without Compromising Lignin Integrity. Industrial & Engineering Chemistry Research, 2020, 59, 1010-1024.	1.8	9
39	Evaluating Protic Ionic Liquid for Woody Biomass One-Pot Pretreatment + Saccharification, Followed by <i>Rhodosporidium toruloides</i> Cultivation. ACS Sustainable Chemistry and Engineering, 2020, 8, 782-791.	3.2	18
40	Lignin induced iron reduction by novel sp., Tolumonas lignolytic BRL6-1. PLoS ONE, 2020, 15, e0233823.	1.1	8
41	Adaptive laboratory evolution of Pseudomonas putida KT2440 improves p-coumaric and ferulic acid catabolism and tolerance. Metabolic Engineering Communications, 2020, 11, e00143.	1.9	73
42	Conversion of poplar biomass into high-energy density tricyclic sesquiterpene jet fuel blendstocks. Microbial Cell Factories, 2020, 19, 208.	1.9	18
43	Generation of ionic liquid tolerant <i>Pseudomonas putida</i> KT2440 strains <i>via</i> adaptive laboratory evolution. Green Chemistry, 2020, 22, 5677-5690.	4.6	29
44	Influence of hydrocracking and ionic liquid pretreatments on composition and properties of Arabidopsis thaliana wild type and CAD mutant lignins. Renewable Energy, 2020, 152, 1241-1249.	4.3	3
45	Whole-Genome Sequence of Brevibacillus borstelensis SDM, Isolated from a Sorghum-Adapted Microbial Community. Microbiology Resource Announcements, 2020, 9, .	0.3	10
46	Variation in sugarcane biomass composition and enzymatic saccharification of leaves, internodes and roots. Biotechnology for Biofuels, 2020, 13, 201.	6.2	11
47	Structural changes in bacterial and fungal soil microbiome components during biosolarization as related to volatile fatty acid accumulation. Applied Soil Ecology, 2020, 153, 103602.	2.1	10
48	Response of <i>Pseudomonas putida</i> to Complex, Aromaticâ€Rich Fractions from Biomass. ChemSusChem, 2020, 13, 4455-4467.	3.6	23
49	Ionic Liquid Tolerance of Yeasts in Family Dipodascaceae and Genus Wickerhamomyces. Applied Biochemistry and Biotechnology, 2020, 191, 1580-1593.	1.4	7
50	A comparative genomics study of 23 Aspergillus species from section Flavi. Nature Communications, 2020, 11, 1106.	5.8	125
51	Theoretical study on the microscopic mechanism of lignin solubilization in Keggin-type polyoxometalate ionic liquids. Physical Chemistry Chemical Physics, 2020, 22, 2878-2886.	1.3	20
52	Succession of physiological stages hallmarks the transcriptomic response of theÂfungus Aspergillus niger to lignocellulose. Biotechnology for Biofuels, 2020, 13, 69.	6.2	4
53	Accumulation of high-value bioproducts <i>in planta</i> can improve the economics of advanced biofuels. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 8639-8648.	3.3	57
54	Multi-Omics Driven Metabolic Network Reconstruction and Analysis of Lignocellulosic Carbon Utilization in Rhodosporidium toruloides. Frontiers in Bioengineering and Biotechnology, 2020, 8, 612832.	2.0	25

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55	The effect of continuous tubular reactor technologies on the pretreatment of lignocellulosic biomass at pilot-scale for bioethanol production. RSC Advances, 2020, 10, 18147-18159.	1.7	17
56	Scale-up of biomass conversion using 1-ethyl-3-methylimidazolium acetateÂas the solvent. Green Energy and Environment, 2019, 4, 432-438.	4.7	36
57	Conversion of Distillerâ€™s Grains to Renewable Fuels and High Value Protein: Integrated Techno-Economic and Life Cycle Assessment. Environmental Science & Technology, 2019, 53, 10525-10533.	4.6	13
58	Greenhouse Gas Footprint, Water-Intensity, and Production Cost of Bio-Based Isopentenol as a Renewable Transportation Fuel. ACS Sustainable Chemistry and Engineering, 2019, 7, 15434-15444.	3.2	16
59	Methyl Ketones from Municipal Solid Waste Blends by Oneâ€Pot Ionicâ€Liquid Pretreatment, Saccharification, and Fermentation. ChemSusChem, 2019, 12, 4313-4322.	3.6	14
60	Ethanol production in switchgrass hydrolysate by ionic liquid-tolerant yeasts. Bioresource Technology Reports, 2019, 7, 100275.	1.5	9
61	A toolset of constitutive promoters for metabolic engineering of Rhodosporidium toruloides. Microbial Cell Factories, 2019, 18, 117.	1.9	50
62	Performance of three delignifying pretreatments on hardwoods: hydrolysis yields, comprehensive mass balances, and lignin properties. Biotechnology for Biofuels, 2019, 12, 213.	6.2	27
63	One-pot bio-derived ionic liquid conversion followed by hydrogenolysis reaction for biomass valorization: A promising approach affecting the morphology and quality of lignin of switchgrass and poplar. Bioresource Technology, 2019, 294, 122214.	4.8	34
64	NaCl enhances Escherichia coli growth and isoprenol production in the presence of imidazolium-based ionic liquids. Bioresource Technology Reports, 2019, 6, 1-5.	1.5	8
65	Techno-economic analysis and life-cycle greenhouse gas mitigation cost of five routes to bio-jet fuel blendstocks. Energy and Environmental Science, 2019, 12, 807-824.	15.6	109
66	Guanidine Riboswitch-Regulated Efflux Transporters Protect Bacteria against Ionic Liquid Toxicity. Journal of Bacteriology, 2019, 201, .	1.0	17
67	Sustainable bioproduction of the blue pigment indigoidine: Expanding the range of heterologous products in<i>R. toruloides</i>to include non-ribosomal peptides. Green Chemistry, 2019, 21, 3394-3406.	4.6	57
68	Pilot-scale hydrothermal pretreatment and optimized saccharification enables bisabolene production from multiple feedstocks. Green Chemistry, 2019, 21, 3152-3164.	4.6	24
69	Conversion of depolymerized sugars and aromatics from engineered feedstocks by two oleaginous red yeasts. Bioresource Technology, 2019, 286, 121365.	4.8	23
70	Methyl ketone production by <i>Pseudomonas putida</i> is enhanced by plantâ€derived amino acids. Biotechnology and Bioengineering, 2019, 116, 1909-1922.	1.7	29
71	Engineering Corynebacterium glutamicum to produce the biogasoline isopentenol from plant biomass hydrolysates. Biotechnology for Biofuels, 2019, 12, 41.	6.2	51
72	Technoâ€economic and greenhouse gas analyses of lignin valorization to eugenol and phenolic products in integrated ethanol biorefineries. Biofuels, Bioproducts and Biorefining, 2019, 13, 978-993.	1.9	40

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73	On the solution structure of kraft lignin in ethylene glycol and its implication for nanoparticle preparation. Nanoscale Advances, 2019, 1, 299-304.	2.2	33
74	Dimethyl sulfoxide assisted dissolution of cellulose in 1-ethyl-3-methylimidazoium acetate: small angle neutron scattering and rheological studies. Cellulose, 2019, 26, 2243-2253.	2.4	14
75	Assessment of biogas production and microbial ecology in a high solid anaerobic digestion of major California food processing residues. Bioresource Technology Reports, 2019, 5, 1-11.	1.5	24
76	A new approach to Cas9-based genome editing in Aspergillus niger that is precise, efficient and selectable. PLoS ONE, 2019, 14, e0210243.	1.1	40
77	Tolerance Characterization and Isoprenol Production of Adapted <i>Escherichia coli</i> in the Presence of Ionic Liquids. ACS Sustainable Chemistry and Engineering, 2019, 7, 1457-1463.	3.2	10
78	Structural Design of Ionic Liquids for Optimizing Aromatic Dissolution. ChemSusChem, 2019, 12, 270-274.	3.6	15
79	Simultaneous application of predictive model and least cost formulation can substantially benefit biorefineries outside Corn Belt in United States: A case study in Florida. Bioresource Technology, 2019, 271, 218-227.	4.8	11
80	N-Heterocyclic Carbene Promoted Decarboxylation of Lignin-Derived Aromatic Acids. ACS Sustainable Chemistry and Engineering, 2018, 6, 7232-7238.	3.2	19
81	Dimethyl Sulfoxide Assisted Ionic Liquid Pretreatment of Switchgrass for Isoprenol Production. ACS Sustainable Chemistry and Engineering, 2018, 6, 4354-4361.	3.2	32
82	Characterization of Lignin Streams during Bionic Liquid-Based Pretreatment from Grass, Hardwood, and Softwood. ACS Sustainable Chemistry and Engineering, 2018, 6, 3079-3090.	3.2	70
83	Forward genetics screen coupled with whole-genome resequencing identifies novel gene targets for improving heterologous enzyme production in Aspergillus niger. Applied Microbiology and Biotechnology, 2018, 102, 1797-1807.	1.7	15
84	Biomass pretreatment using deep eutectic solvents from lignin derived phenols. Green Chemistry, 2018, 20, 809-815.	4.6	235
85	Linking secondary metabolites to gene clusters through genome sequencing of six diverse <i>Aspergillus</i> species. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E753-E761.	3.3	126
86	Annotation of the Corymbia terpene synthase gene family shows broad conservation but dynamic evolution of physical clusters relative to Eucalyptus. Heredity, 2018, 121, 87-104.	1.2	17
87	Cascade Production of Lactic Acid from Universal Types of Sugars Catalyzed by Lanthanum Triflate. ChemSusChem, 2018, 11, 598-604.	3.6	18
88	Solubilization and Upgrading of High Polyethylene Terephthalate Loadings in a Lowâ€Costing Bifunctional Ionic Liquid. ChemSusChem, 2018, 11, 781-792.	3.6	62
89	A bacterial pioneer produces cellulase complexes that persist through community succession. Nature Microbiology, 2018, 3, 99-107.	5.9	38
90	Regulation of Yeast-to-Hyphae Transition in Yarrowia lipolytica. MSphere, 2018, 3, .	1.3	35

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91	Rapid characterization of the activities of lignin-modifying enzymes based on nanostructure-initiator mass spectrometry (NIMS). Biotechnology for Biofuels, 2018, 11, 266.	6.2	14
92	Bioconversion of Giant Cane for Integrated Production of Biohydrogen, Carboxylic Acids, and Polyhydroxyalkanoates (PHAs) in a Multistage Biorefinery Approach. ACS Sustainable Chemistry and Engineering, 2018, 6, 15361-15373.	3.2	29
93	Engineering glycoside hydrolase stability by the introduction of zinc binding. Acta Crystallographica Section D: Structural Biology, 2018, 74, 702-710.	1.1	1
94	Short-chain ketone production by engineered polyketide synthases in Streptomyces albus. Nature Communications, 2018, 9, 4569.	5.8	52
95	Investigation of inter- and intraspecies variation through genome sequencing of Aspergillus section Nigri. Nature Genetics, 2018, 50, 1688-1695.	9.4	160
96	Jungle Express is a versatile repressor system for tight transcriptional control. Nature Communications, 2018, 9, 3617.	5.8	33
97	Structure-based Engineering of a Plant-Fungal Hybrid Peroxidase for Enhanced Temperature and pH Tolerance. Cell Chemical Biology, 2018, 25, 974-983.e3.	2.5	10
98	Efficient conversion of lignin into a water-soluble polymer by a chelator-mediated Fenton reaction: optimization of H₂O₂use and performance as a dispersant. Green Chemistry, 2018, 20, 3024-3037.	4.6	36
99	Demonstrating a separation-free process coupling ionic liquid pretreatment, saccharification, and fermentation with <i>Rhodosporidium toruloides</i> to produce advanced biofuels. Green Chemistry, 2018, 20, 2870-2879.	4.6	77
100	Cloning and Expression of Heterologous Cellulases and Enzymes in Aspergillus niger. Methods in Molecular Biology, 2018, 1796, 123-133.	0.4	0
101	Functional genomics of lipid metabolism in the oleaginous yeast Rhodosporidium toruloides. ELife, 2018, 7, .	2.8	98
102	Natural Variation in the Multidrug Efflux Pump <i>SGE1</i> Underlies Ionic Liquid Tolerance in Yeast. Genetics, 2018, 210, 219-234.	1.2	30
103	Microbial Community Structure and Functional Potential Along a Hypersaline Gradient. Frontiers in Microbiology, 2018, 9, 1492.	1.5	41
104	Elucidating transfer hydrogenation mechanisms in non-catalytic lignin depolymerization. Green Chemistry, 2018, 20, 3566-3580.	4.6	11
105	A mosaic monoploid reference sequence for the highly complex genome of sugarcane. Nature Communications, 2018, 9, 2638.	5.8	299
106	Biocompatible Choline-Based Deep Eutectic Solvents Enable One-Pot Production of Cellulosic Ethanol. ACS Sustainable Chemistry and Engineering, 2018, 6, 8914-8919.	3.2	63
107	Development of an integrated approach for Î±-pinene recovery and sugar production from loblolly pine using ionic liquids. Green Chemistry, 2017, 19, 1117-1127.	4.6	10
108	Structure and activity of thermophilic methanogenic microbial communities exposed to quaternary ammonium sanitizer. Journal of Environmental Sciences, 2017, 56, 164-168.	3.2	6

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109	Nitrogen amendment of green waste impacts microbial community, enzyme secretion and potential for lignocellulose decomposition. Process Biochemistry, 2017, 52, 214-222.	1.8	20
110	Scale-up and process integration of sugar production by acidolysis of municipal solid waste/corn stover blends in ionic liquids. Biotechnology for Biofuels, 2017, 10, 13.	6.2	24
111	Understanding factors controlling depolymerization and polymerization in catalytic degradation of Î2-ether linked model lignin compounds by versatile peroxidase. Green Chemistry, 2017, 19, 2145-2154.	4.6	29
112	Characterization of white poplar and eucalyptus after ionic liquid pretreatment as a function of biomass loading using X-ray diffraction and small angle neutron scattering. Bioresource Technology, 2017, 232, 113-118.	4.8	24
113	Treatment of lignite and thermal coal with low cost amino acid based ionic liquid-water mixtures. Fuel, 2017, 202, 296-306.	3.4	62
114	One-pot integrated biofuel production using low-cost biocompatible protic ionic liquids. Green Chemistry, 2017, 19, 3152-3163.	4.6	115
115	High-Quality Draft Genome Sequences of Four Lignocellulose-Degrading Bacteria Isolated from Puerto Rican Forest Soil: <i>Gordonia</i> sp., <i>Paenibacillus</i> sp., <i>Variovorax</i> sp., and <i>Vogesella</i> sp. Genome Announcements, 2017, 5, .	0.8	18
116	Parametric study for the optimization of ionic liquid pretreatment of corn stover. Bioresource Technology, 2017, 241, 627-637.	4.8	35
117	From lignin subunits to aggregates: insights into lignin solubilization. Green Chemistry, 2017, 19, 3272-3281.	4.6	149
118	Engineering high-level production of fatty alcohols by Saccharomyces cerevisiae from lignocellulosic feedstocks. Metabolic Engineering, 2017, 42, 115-125.	3.6	97
119	Structure of aryl O-demethylase offers molecular insight into a catalytic tyrosine-dependent mechanism. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E3205-E3214.	3.3	24
120	Ternary ionic liquidâ€“water pretreatment systems of an agave bagasse and municipal solid waste blend. Biotechnology for Biofuels, 2017, 10, 72.	6.2	22
121	Chemoselective Methylation of Phenolic Hydroxyl Group Prevents Quinone Methide Formation and Repolymerization During Lignin Depolymerization. ACS Sustainable Chemistry and Engineering, 2017, 5, 3913-3919.	3.2	55
122	Biomass Pretreatment Using Dilute Aqueous Ionic Liquid (IL) Solutions with Dynamically Varying IL Concentration and Its Impact on IL Recycling. ACS Sustainable Chemistry and Engineering, 2017, 5, 4408-4413.	3.2	25
123	Strategy for Extending the Stability of Bioâ€oilâ€Derived Phenolic Oligomers by Mild Hydrotreatment with Ionicâ€Liquidâ€Stabilized Nanoparticles. ChemSusChem, 2017, 10, 884-893.	3.6	2
124	Rhorix: An interface between quantum chemical topology and the 3D graphics program blender. Journal of Computational Chemistry, 2017, 38, 2538-2552.	1.5	8
125	Life-Cycle Greenhouse Gas and Water Intensity of Cellulosic Biofuel Production Using Cholinium Lysinate Ionic Liquid Pretreatment. ACS Sustainable Chemistry and Engineering, 2017, 5, 10176-10185.	3.2	49
126	Survey of Lignin-Structure Changes and Depolymerization during Ionic Liquid Pretreatment. ACS Sustainable Chemistry and Engineering, 2017, 5, 10116-10127.	3.2	77

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127	Effect of Ionic Liquid Pretreatment on the Porosity of Pine: Insights from Small-Angle Neutron Scattering, Nitrogen Adsorption Analysis, and X-ray Diffraction. Energy & Fuels, 2017, 31, 10874-10879.	2.5	6
128	Development and characterization of a thermophilic, lignin degrading microbiota. Process Biochemistry, 2017, 63, 193-203.	1.8	29
129	Base-Catalyzed Depolymerization of Solid Lignin-Rich Streams Enables Microbial Conversion. ACS Sustainable Chemistry and Engineering, 2017, 5, 8171-8180.	3.2	115
130	Conversion of cellulose rich municipal solid waste blends using ionic liquids: feedstock convertibility and process scale-up. RSC Advances, 2017, 7, 36585-36593.	1.7	16
131	1-Ethyl-3-methylimidazolium tolerance and intracellular lipid accumulation of 38 oleaginous yeast species. Applied Microbiology and Biotechnology, 2017, 101, 8621-8631.	1.7	9
132	Predictive modeling to de-risk bio-based manufacturing by adapting to variability in lignocellulosic biomass supply. Bioresource Technology, 2017, 243, 676-685.	4.8	16
133	Comparison of soil biosolarization with mesophilic and thermophilic solid digestates on soil microbial quantity and diversity. Applied Soil Ecology, 2017, 119, 183-191.	2.1	18
134	Expression of Aspergillus niger CAZymes is determined by compositional changes in wheat straw generated by hydrothermal or ionic liquid pretreatments. Biotechnology for Biofuels, 2017, 10, 35.	6.2	18
135	Impact of lignin polymer backbone esters on ionic liquid pretreatment of poplar. Biotechnology for Biofuels, 2017, 10, 101.	6.2	48
136	Efficient dehydration and recovery of ionic liquid after lignocellulosic processing using pervaporation. Biotechnology for Biofuels, 2017, 10, 154.	6.2	72
137	Catalytic transfer hydrogenolysis of ionic liquid processed biorefinery lignin to phenolic compounds. Green Chemistry, 2017, 19, 215-224.	4.6	70
138	Sequential enzymatic saccharification and fermentation of ionic liquid and organosolv pretreated agave bagasse for ethanol production. Bioresource Technology, 2017, 225, 191-198.	4.8	44
139	Dynamic changes of substrate reactivity and enzyme adsorption on partially hydrolyzed cellulose. Biotechnology and Bioengineering, 2017, 114, 503-515.	1.7	24
140	Reply to Kiser: Dioxygen binding in NOV1 crystal structures. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E6029-E6030.	3.3	4
141	Expression of naturally ionic liquid-tolerant thermophilic cellulases in Aspergillus niger. PLoS ONE, 2017, 12, e0189604.	1.1	13
142	Generation of a platform strain for ionic liquid tolerance using adaptive laboratory evolution. Microbial Cell Factories, 2017, 16, 204.	1.9	60
143	Rhodosporidium toruloides: a new platform organism for conversion of lignocellulose into terpene biofuels and bioproducts. Biotechnology for Biofuels, 2017, 10, 241.	6.2	150
144	Low cost ionic liquidâ€“water mixtures for effective extraction of carbohydrate and lipid from algae. Faraday Discussions, 2017, 206, 93-112.	1.6	64

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145	SbCOMT (Bmr12) is involved in the biosynthesis of tricin-lignin in sorghum. PLoS ONE, 2017, 12, e0178160.	1.1	59
146	Bioeconomy Leaders and Innovators Q&A. Industrial Biotechnology, 2016, 12, 141-145.	0.5	0
147	Editorial: Biomass Modification, Characterization, and Process Monitoring Analytics to Support Biofuel and Biomaterial Production. Frontiers in Bioengineering and Biotechnology, 2016, 4, 25.	2.0	1
148	Expression of S-adenosylmethionine Hydrolase in Tissues Synthesizing Secondary Cell Walls Alters Specific Methylated Cell Wall Fractions and Improves Biomass Digestibility. Frontiers in Bioengineering and Biotechnology, 2016, 4, 58.	2.0	8
149	Evaluation of Relationships between Growth Rate, Tree Size, Lignocellulose Composition, and Enzymatic Saccharification in Interspecific Corymbia Hybrids and Parental Taxa. Frontiers in Plant Science, 2016, 7, 1705.	1.7	1
150	Structural features affecting the enzymatic digestibility of pine wood pretreated with ionic liquids. Biotechnology and Bioengineering, 2016, 113, 540-549.	1.7	52
151	CO2 enabled process integration for the production of cellulosic ethanol using bionic liquids. Energy and Environmental Science, 2016, 9, 2822-2834.	15.6	63
152	Effect of aging on lignin content, composition and enzymatic saccharification in Corymbia hybrids and parental taxa between years 9 and 12. Biomass and Bioenergy, 2016, 93, 50-59.	2.9	17
153	Structure and mechanism of NOV1, a resveratrol-cleaving dioxygenase. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 14324-14329.	3.3	50
154	Ionic Liquids Impact the Bioenergy Feedstock-Degrading Microbiome and Transcription of Enzymes Relevant to Polysaccharide Hydrolysis. MSystems, 2016, 1, .	1.7	15
155	Enrichment of microbial communities tolerant to the ionic liquids tetrabutylphosphonium chloride and tributylethylphosphonium diethylphosphate. Applied Microbiology and Biotechnology, 2016, 100, 5639-5652.	1.7	6
156	Nonâ€invasive imaging of cellulose microfibril orientation within plant cell walls by polarized Raman microspectroscopy. Biotechnology and Bioengineering, 2016, 113, 82-90.	1.7	21
157	Structural and Biochemical Characterization of the Early and Late Enzymes in the Lignin Î²-Aryl Ether Cleavage Pathway from Sphingobium sp. SYK-6. Journal of Biological Chemistry, 2016, 291, 10228-10238.	1.6	44
158	Evaluation of agave bagasse recalcitrance using AFEXâ„¢, autohydrolysis, and ionic liquid pretreatments. Bioresource Technology, 2016, 211, 216-223.	4.8	74
159	Development of an E. coli strain for one-pot biofuel production from ionic liquid pretreated cellulose and switchgrass. Green Chemistry, 2016, 18, 4189-4197.	4.6	52
160	Switchable ionic liquids based on di-carboxylic acids for one-pot conversion of biomass to an advanced biofuel. Green Chemistry, 2016, 18, 4012-4021.	4.6	31
161	Fractional pretreatment of raw and calcium oxalate-extracted agave bagasse using ionic liquid and alkaline hydrogen peroxide. Biomass and Bioenergy, 2016, 91, 48-55.	2.9	29
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