Gregg Beckham

List of Publications by Citations

232 papers	17,346 citations	69 h-index	126 g-index
257 ext. papers	21,552 ext. citations	10.8 avg, IF	7 L-index

#	Paper	IF	Citations
232	Lignin valorization: improving lignin processing in the biorefinery. *Science*, **2014**, 344, 1246843	33.3	2274
231	Chemicals from lignin: an interplay of lignocellulose fractionation, depolymerisation, and upgrading. *Chemical Society Reviews*, **2018**, 47, 852-908	58.5	1125
230	Deconstruction of lignocellulosic biomass to fuels and chemicals. *Annual Review of Chemical and Biomolecular Engineering*, **2011**, 2, 121-45	8.9	684
229	Fungal cellulases. *Chemical Reviews*, **2015**, 115, 1308-448	68.1	513
228	Lignin valorization through integrated biological funneling and chemical catalysis. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 12013-8	11.5	494
227	Adipic acid production from lignin. *Energy and Environmental Science*, **2015**, 8, 617-628	35.4	389
226	Opportunities and challenges in biological lignin valorization. *Current Opinion in Biotechnology*, **2016**, 42, 40-53	11.4	384
225	Characterization and engineering of a plastic-degrading aromatic polyesterase. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E4350-E4357	11.5	369
224	Lignocellulose degradation mechanisms across the Tree of Life. *Current Opinion in Chemical Biology*, **2015**, 29, 108-19	9.7	317
223	Computational Study of Bond Dissociation Enthalpies for a Large Range of Native and Modified Lignins. *Journal of Physical Chemistry Letters*, **2011**, 2, 2846-2852	6.4	259
222	A Mechanistic Investigation of Acid-Catalyzed Cleavage of Aryl-Ether Linkages: Implications for Lignin Depolymerization in Acidic Environments. *ACS Sustainable Chemistry and Engineering*, **2014**, 2, 472-485	8.3	251
221	Towards lignin consolidated bioprocessing: simultaneous lignin depolymerization and product generation by bacteria. *Green Chemistry*, **2015**, 17, 4951-4967	10	235
220	A perspective on oxygenated species in the refinery integration of pyrolysis oil. *Green Chemistry*, **2014**, 16, 407-453	10	199
219	Quantum mechanical calculations suggest that lytic polysaccharide monooxygenases use a copper-oxyl, oxygen-rebound mechanism. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 149-54	11.5	179
218	Reductive Catalytic Fractionation of Corn Stover Lignin. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 6940-6950	8.3	169
217	Molecular-level origins of biomass recalcitrance: decrystallization free energies for four common cellulose polymorphs. *Journal of Physical Chemistry B*, **2011**, 115, 4118-27	3.4	161
216	Process Design and Economics for the Conversion of Lignocellulosic Biomass to Hydrocarbons: Dilute-Acid and Enzymatic Deconstruction of Biomass to Sugars and Biological Conversion of Sugars to Hydrocarbons		156

215	Aromatic catabolic pathway selection for optimal production of pyruvate and lactate from lignin. *Metabolic Engineering*, **2015**, 28, 240-247	9.7	155
214	Enhancing muconic acid production from glucose and lignin-derived aromatic compounds via increased protocatechuate decarboxylase activity. *Metabolic Engineering Communications*, **2016**, 3, 111-119	6.5	149
213	Heterogeneous Diels–Alder catalysis for biomass-derived aromatic compounds. *Green Chemistry*, **2017**, 19, 3468-3492	10	145
212	Guidelines for performing lignin-first biorefining. *Energy and Environmental Science*, **2021**, 14, 262-292	35.4	143
211	Flowthrough Reductive Catalytic Fractionation of Biomass. *Joule*, **2017**, 1, 613-622	27.8	141
210	Extensions to the likelihood maximization approach for finding reaction coordinates. *Journal of Chemical Physics*, **2007**, 127, 034109	3.9	139
209	Lignin depolymerisation by nickel supported layered-double hydroxide catalysts. *Green Chemistry*, **2014**, 16, 824-835	10	134
208	The mechanism of cellulose hydrolysis by a two-step, retaining cellobiohydrolase elucidated by structural and transition path sampling studies. *Journal of the American Chemical Society*, **2014**, 136, 321-9	16.4	134
207	Crystal structure and computational characterization of the lytic polysaccharide monooxygenase GH61D from the Basidiomycota fungus Phanerochaete chrysosporium. *Journal of Biological Chemistry*, **2013**, 288, 12828-39	5.4	131
206	Glycosylated linkers in multimodular lignocellulose-degrading enzymes dynamically bind to cellulose. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 14646-51	11.5	131
205	Base-Catalyzed Depolymerization of Biorefinery Lignins. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 1474-1486	8.3	125
204	Fungal cellulases and complexed cellulosomal enzymes exhibit synergistic mechanisms in cellulose deconstruction. *Energy and Environmental Science*, **2013**, 6, 1858	35.4	118
203	Path sampling calculation of methane diffusivity in natural gas hydrates from a water-vacancy assisted mechanism. *Journal of the American Chemical Society*, **2008**, 130, 17342-50	16.4	113
202	Applications of computational science for understanding enzymatic deconstruction of cellulose. *Current Opinion in Biotechnology*, **2011**, 22, 231-8	11.4	111
201	High-temperature behavior of cellulose I. *Journal of Physical Chemistry B*, **2011**, 115, 2155-66	3.4	110
200	cis,cis-Muconic acid: separation and catalysis to bio-adipic acid for nylon-6,6 polymerization. *Green Chemistry*, **2016**, 18, 3397-3413	10	109
199	Catalytic amino acid production from biomass-derived intermediates. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 5093-5098	11.5	107
198	How sugars pucker: electronic structure calculations map the kinetic landscape of five biologically paramount monosaccharides and their implications for enzymatic catalysis. *Journal of the American Chemical Society*, **2014**, 136, 1008-22	16.4	106

197	Identification of amino acids responsible for processivity in a Family 1 carbohydrate-binding module from a fungal cellulase. *Journal of Physical Chemistry B*, **2010**, 114, 1447-53	3.4	102
196	Comparison of Cellulose I Simulations with Three Carbohydrate Force Fields. *Journal of Chemical Theory and Computation*, **2012**, 8, 735-48	6.4	101
195	The Techno-Economic Basis for Coproduct Manufacturing To Enable Hydrocarbon Fuel Production from Lignocellulosic Biomass. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 3196-3211	8.3	101
194	Succinic acid production on xylose-enriched biorefinery streams by Actinobacillus succinogenes in batch fermentation. *Biotechnology for Biofuels*, **2016**, 9, 28	7.8	99
193	Enhanced Hydrodeoxygenation ofm-Cresol over Bimetallic PtMo Catalysts through an Oxophilic Metal-Induced Tautomerization Pathway. *ACS Catalysis*, **2016**, 6, 4356-4368	13.1	98
192	Harnessing glycosylation to improve cellulase activity. *Current Opinion in Biotechnology*, **2012**, 23, 338-45	11.4	96
191	Role of the Support and Reaction Conditions on the Vapor-Phase Deoxygenation of m-Cresol over Pt/C and Pt/TiO2 Catalysts. *ACS Catalysis*, **2016**, 6, 2715-2727	13.1	95
190	Alkaline Pretreatment of Corn Stover: Bench-Scale Fractionation and Stream Characterization. *ACS Sustainable Chemistry and Engineering*, **2014**, 2, 1481-1491	8.3	92
189	Characterization and engineering of a two-enzyme system for plastics depolymerization. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 25476-25485	11.5	90
188	The O-glycosylated linker from the Trichoderma reesei Family 7 cellulase is a flexible, disordered protein. *Biophysical Journal*, **2010**, 99, 3773-81	2.9	89
187	Multiple functions of aromatic-carbohydrate interactions in a processive cellulase examined with molecular simulation. *Journal of Biological Chemistry*, **2011**, 286, 41028-35	5.4	88
186	Base-Catalyzed Depolymerization of Solid Lignin-Rich Streams Enables Microbial Conversion. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 8171-8180	8.3	87
185	Combining Reclaimed PET with Bio-based Monomers Enables Plastics Upcycling. *Joule*, **2019**, 3, 1006-1027	27.8	84
184	Bioprocess development for muconic acid production from aromatic compounds and lignin. *Green Chemistry*, **2018**, 20, 5007-5019	10	84
183	Alkaline Pretreatment of Switchgrass. *ACS Sustainable Chemistry and Engineering*, **2015**, 3, 1479-1491	8.3	83
182	Renewable acrylonitrile production. *Science*, **2017**, 358, 1307-1310	33.3	82
181	Hallmarks of processivity in glycoside hydrolases from crystallographic and computational studies of the Serratia marcescens chitinases. *Journal of Biological Chemistry*, **2012**, 287, 36322-30	5.4	81
180	Life cycle assessment of adipic acid production from lignin. *Green Chemistry*, **2018**, 20, 3857-3866	10	79

179	Carbohydrate-protein interactions that drive processive polysaccharide translocation in enzymes revealed from a computational study of cellobiohydrolase processivity. *Journal of the American Chemical Society*, **2014**, 136, 8810-9	16.4	79
178	Structural and electronic snapshots during the transition from a Cu(II) to Cu(I) metal center of a lytic polysaccharide monooxygenase by X-ray photoreduction. *Journal of Biological Chemistry*, **2014**, 289, 18782-92	5.4	78
177	Chemical and biological catalysis for plastics recycling and upcycling. *Nature Catalysis*, **2021**, 4, 539-556	36.5	78
176	A promiscuous cytochrome P450 aromatic O-demethylase for lignin bioconversion. *Nature Communications*, **2018**, 9, 2487	17.4	77
175	Pyrolysis reaction networks for lignin model compounds: unraveling thermal deconstruction of □O-4 and □O-4 compounds. *Green Chemistry*, **2016**, 18, 1762-1773	10	76
174	Surface-mediated nucleation in the solid-state polymorph transformation of terephthalic acid. *Journal of the American Chemical Society*, **2007**, 129, 4714-23	16.4	76
173	Cellulase linkers are optimized based on domain type and function: insights from sequence analysis, biophysical measurements, and molecular simulation. *PLoS ONE*, **2012**, 7, e48615	3.7	76
172	Towards a molecular-level theory of carbohydrate processivity in glycoside hydrolases. *Current Opinion in Biotechnology*, **2014**, 27, 96-106	11.4	73
171	Effects of lytic polysaccharide monooxygenase oxidation on cellulose structure and binding of oxidized cellulose oligomers to cellulases. *Journal of Physical Chemistry B*, **2015**, 119, 6129-43	3.4	72
170	Charge engineering of cellulases improves ionic liquid tolerance and reduces lignin inhibition. *Biotechnology and Bioengineering*, **2014**, 111, 1541-9	4.9	72
169	Continuous succinic acid production by Actinobacillus succinogenes on xylose-enriched hydrolysate. *Biotechnology for Biofuels*, **2015**, 8, 181	7.8	72
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167	Glycoside hydrolase processivity is directly related to oligosaccharide binding free energy. *Journal of the American Chemical Society*, **2013**, 135, 18831-9	16.4	71
166	Eliminating a global regulator of carbon catabolite repression enhances the conversion of aromatic lignin monomers to muconate in KT2440. *Metabolic Engineering Communications*, **2017**, 5, 19-25	6.5	70
165	Structural characterization of a unique marine animal family 7 cellobiohydrolase suggests a mechanism of cellulase salt tolerance. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 10189-94	11.5	70
164	Metabolic engineering of Pseudomonas putida for increased polyhydroxyalkanoate production from lignin. *Microbial Biotechnology*, **2020**, 13, 290-298	6.3	70
163	The energy landscape for the interaction of the family 1 carbohydrate-binding module and the cellulose surface is altered by hydrolyzed glycosidic bonds. *Journal of Physical Chemistry B*, **2009**, 113, 10994-1002	3.4	69
162	Probing the role of N-linked glycans in the stability and activity of fungal cellobiohydrolases by mutational analysis. *Cellulose*, **2009**, 16, 699-709	5.5	68

161	Revisiting alkaline aerobic lignin oxidation. *Green Chemistry*, **2018**, 20, 3828-3844	10	67
160	Binding preferences, surface attachment, diffusivity, and orientation of a family 1 carbohydrate-binding module on cellulose. *Journal of Biological Chemistry*, **2012**, 287, 20603-12	5.4	67
159	Innovative Chemicals and Materials from Bacterial Aromatic Catabolic Pathways. *Joule*, **2019**, 3, 1523-1537	17.8	66
158	Differences in S/G ratio in natural poplar variants do not predict catalytic depolymerization monomer yields. *Nature Communications*, **2019**, 10, 2033	17.4	66
157	Specificity of O-glycosylation in enhancing the stability and cellulose binding affinity of Family 1 carbohydrate-binding modules. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 7612-7	11.5	66
156	Lignin Depolymerization with Nitrate-Intercalated Hydrotalcite Catalysts. *ACS Catalysis*, **2016**, 6, 1316-1328	13.1	65
155	Probing carbohydrate product expulsion from a processive cellulase with multiple absolute binding free energy methods. *Journal of Biological Chemistry*, **2011**, 286, 18161-9	5.4	64
154	Lignin depolymerization by fungal secretomes and a microbial sink. *Green Chemistry*, **2016**, 18, 6046-6062	10	62
153	Examination of the □chitin structure and decrystallization thermodynamics at the nanoscale. *Journal of Physical Chemistry B*, **2011**, 115, 4516-22	3.4	61
152	CRISPR EnAbled Trackable genome Engineering for isopropanol production in Escherichia coli. *Metabolic Engineering*, **2017**, 41, 1-10	9.7	60
151	Engineering Pseudomonas putida KT2440 for efficient ethylene glycol utilization. *Metabolic Engineering*, **2018**, 48, 197-207	9.7	60
150	3D electron tomography of pretreated biomass informs atomic modeling of cellulose microfibrils. *ACS Nano*, **2013**, 7, 8011-9	16.7	60
149	Ammonia Pretreatment of Corn Stover Enables Facile Lignin Extraction. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 2544-2561	8.3	57
148	Renewable Unsaturated Polyesters from Muconic Acid. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 6867-6876	8.3	56
147	Structural, biochemical, and computational characterization of the glycoside hydrolase family 7 cellobiohydrolase of the tree-killing fungus Heterobasidion irregulare. *Journal of Biological Chemistry*, **2013**, 288, 5861-72	5.4	55
146	Conversion and assimilation of furfural and 5-(hydroxymethyl)furfural by KT2440. *Metabolic Engineering Communications*, **2017**, 4, 22-28	6.5	52
145	Distinct roles of N- and O-glycans in cellulase activity and stability. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 13667-13672	11.5	52
144	Computational investigation of glycosylation effects on a family 1 carbohydrate-binding module. *Journal of Biological Chemistry*, **2012**, 287, 3147-55	5.4	52

143	Molecular mechanism of the chitinolytic peroxygenase reaction. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 1504-1513	11.5	52
142	Succinic acid production from lignocellulosic hydrolysate by Basfia succiniciproducens. *Bioresource Technology*, **2016**, 214, 558-566	11	52
141	Thermochemical wastewater valorization via enhanced microbial toxicity tolerance. *Energy and Environmental Science*, **2018**, 11, 1625-1638	35.4	51
140	Decrystallization of Oligosaccharides from the Cellulose I Surface with Molecular Simulation. *Journal of Physical Chemistry Letters*, **2011**, 2, 1546-1550	6.4	50
139	Passive membrane transport of lignin-related compounds. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 23117-23123	11.5	49
138	Product binding varies dramatically between processive and nonprocessive cellulase enzymes. *Journal of Biological Chemistry*, **2012**, 287, 24807-13	5.4	49
137	Binding site dynamics and aromatic-carbohydrate interactions in processive and non-processive family 7 glycoside hydrolases. *Journal of Physical Chemistry B*, **2013**, 117, 4924-33	3.4	48
136	Optimizing Nucleus Size Metrics for Liquid-Solid Nucleation from Transition Paths of Near-Nanosecond Duration. *Journal of Physical Chemistry Letters*, **2011**, 2, 1133-8	6.4	48
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134	Reductive Catalytic Fractionation of C-Lignin. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 11211-11218	8.3	47
133	Manufacturing energy and greenhouse gas emissions associated with plastics consumption. *Joule*, **2021**, 5, 673-686	27.8	47
132	Conversion of Polyolefin Waste to Liquid Alkanes with Ru-Based Catalysts under Mild Conditions. *Jacs Au*, **2021**, 1, 8-12		46
131	The AlphaBet(a) of Salty Glucose Pyrolysis: Computational Investigations Reveal Carbohydrate Pyrolysis Catalytic Action by Sodium Ions. *ACS Catalysis*, **2015**, 5, 192-202	13.1	45
130	Evaluation of Clean Fractionation Pretreatment for the Production of Renewable Fuels and Chemicals from Corn Stover. *ACS Sustainable Chemistry and Engineering*, **2014**, 2, 1364-1376	8.3	45
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128	Evidence for a size dependent nucleation mechanism in solid state polymorph transformations. *Journal of Physical Chemistry B*, **2008**, 112, 7460-6	3.4	44
127	Laboratory evolution reveals the metabolic and regulatory basis of ethylene glycol metabolism by Pseudomonas putida KT2440. *Environmental Microbiology*, **2019**, 21, 3669-3682	5.2	43
126	Outer membrane vesicles catabolize lignin-derived aromatic compounds in KT2440. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 9302-9310	11.5	43

125	Two-component order parameter for quantifying clathrate hydrate nucleation and growth. *Journal of Chemical Physics*, **2014**, 140, 164506	3.9	41
124	Bio-based polymers with performance-advantaged properties. *Nature Reviews Materials*,	73.3	41
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122	Mixed Carboxylic Acid Production by Megasphaera elsdenii from Glucose and Lignocellulosic Hydrolysate. *Fermentation*, **2017**, 3, 10	4.7	40
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116	Ethanol dehydration in HZSM-5 studied by density functional theory: evidence for a concerted process. *Journal of Physical Chemistry A*, **2015**, 119, 3604-14	2.8	35
115	Accelerating pathway evolution by increasing the gene dosage of chromosomal segments. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 7105-7110	11.5	35
114	Radical Nature of C-Lignin. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 5327-5335	8.3	34
113	Acidolysis of □O-4 Aryl-Ether Bonds in Lignin Model Compounds: A Modeling and Experimental Study. *ACS Sustainable Chemistry and Engineering*, **2015**, 3, 1339-1347	8.3	33
112	Ru-Sn/AC for the Aqueous-Phase Reduction of Succinic Acid to 1,4-Butanediol under Continuous Process Conditions. *ACS Catalysis*, **2017**, 7, 6207-6219	13.1	33
111	Glycosylation of Cellulases: Engineering Better Enzymes for Biofuels. *Advances in Carbohydrate Chemistry and Biochemistry*, **2015**, 72, 63-112	3.7	33
110	Engineering glucose metabolism for enhanced muconic acid production in Pseudomonas putida KT2440. *Metabolic Engineering*, **2020**, 59, 64-75	9.7	33
109	Integrated diesel production from lignocellulosic sugars via oleaginous yeast. *Green Chemistry*, **2018**, 20, 4349-4365	10	32
108	Process Design and Economics for the Conversion of Lignocellulosic Biomass to Hydrocarbon Fuels and Coproducts: 2018 Biochemical Design Case Update; Biochemical Deconstruction and Conversion of Biomass to Fuels and Products via Integrated Biorefinery Pathways		32

107	Clean Fractionation Pretreatment Reduces Enzyme Loadings for Biomass Saccharification and Reveals the Mechanism of Free and Cellulosomal Enzyme Synergy. *ACS Sustainable Chemistry and Engineering*, **2014**, 2, 1377-1387	8.3	31
106	Quantification of acidic compounds in complex biomass-derived streams. *Green Chemistry*, **2016**, 18, 4750-4760	10	31
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104	Metabolic Engineering of Actinobacillus succinogenes Provides Insights into Succinic Acid Biosynthesis. *Applied and Environmental Microbiology*, **2017**, 83,	4.8	27
103	Systematic parameterization of lignin for the CHARMM force field. *Green Chemistry*, **2019**, 21, 109-122	10	27
102	Computational investigation of the pH dependence of loop flexibility and catalytic function in glycoside hydrolases. *Journal of Biological Chemistry*, **2013**, 288, 12175-86	5.4	27
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100	Nanomechanics of cellulose deformation reveal molecular defects that facilitate natural deconstruction. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 9825-9830	11.5	25
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98	Production of itaconic acid from alkali pretreated lignin by dynamic two stage bioconversion. *Nature Communications*, **2021**, 12, 2261	17.4	25
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95	Molecular-scale features that govern the effects of -glycosylation on a carbohydrate-binding module. *Chemical Science*, **2015**, 6, 7185-7189	9.4	23
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93	Engineering oxidation in Yarrowia lipolytica for methyl ketone production. *Metabolic Engineering*, **2018**, 48, 52-62	9.7	23
92	Characterization and Catalytic Upgrading of Aqueous Stream Carbon from Catalytic Fast Pyrolysis of Biomass. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 11761-11769	8.3	22
91	Enabling microbial syringol conversion through structure-guided protein engineering. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 13970-13976	11.5	22
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88	Aromatic-Mediated Carbohydrate Recognition in Processive Serratia marcescens Chitinases. *Journal of Physical Chemistry B*, **2016**, 120, 1236-49	3.4	21
87	The dissociation mechanism of processive cellulases. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 23061-23067	11.5	21
86	Hydrogenolysis of Polypropylene and Mixed Polyolefin Plastic Waste over Ru/C to Produce Liquid Alkanes. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 11661-11666	8.3	21
85	Automated Transformation of Lignin Topologies into Atomic Structures with LigninBuilder. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 3443-3453	8.3	21
84	Who's on base? Revealing the catalytic mechanism of inverting family 6 glycoside hydrolases. *Chemical Science*, **2016**, 7, 5955-5968	9.4	20
83	Valorization of aqueous waste streams from thermochemical biorefineries. *Green Chemistry*, **2019**, 21, 4217-4230	10	20
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79	Gene amplification, laboratory evolution, and biosensor screening reveal MucK as a terephthalic acid transporter in Acinetobacter baylyi ADP1. *Metabolic Engineering*, **2020**, 62, 260-274	9.7	19
78	Tailoring diesel bioblendstock from integrated catalytic upgrading of carboxylic acids: a fuel property first approach. *Green Chemistry*, **2019**, 21, 5813-5827	10	18
77	Propionic acid production from corn stover hydrolysate by. *Biotechnology for Biofuels*, **2017**, 10, 200	7.8	18
76	A protocatechuate biosensor for KT2440 via promoter and protein evolution. *Metabolic Engineering Communications*, **2018**, 6, 33-38	6.5	18
75	Recovery of Fuel-Precursor Lipids from Oleaginous Yeast. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 2921-2931	8.3	17
74	Lignin-KMC: A Toolkit for Simulating Lignin Biosynthesis. *ACS Sustainable Chemistry and Engineering* , **2019**, 7, 18313-18322	8.3	17
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69	Activity and Thermostability of GH5 Endoglucanase Chimeras from Mesophilic and Thermophilic Parents. *Applied and Environmental Microbiology*, **2019**, 85,	4.8	16
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63	Endoglucanase peripheral loops facilitate complexation of glucan chains on cellulose via adaptive coupling to the emergent substrate structures. *Journal of Physical Chemistry B*, **2013**, 117, 10750-8	3.4	14
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