Michael G Resch

List of Publications by Year
in descending order

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27 papers	1,762 citations	471509 17 h-index	526287 27 g-index
27 all docs	27 docs citations	27 times ranked	2550 citing authors

#	Article	IF	Citations
1	Revealing Natureâ€™s Cellulase Diversity: The Digestion Mechanism of Caldicellulosiruptor bescii CelA. Science, 2013, 342, 1513-1516.	12.6	253
2	Reductive Catalytic Fractionation of Corn Stover Lignin. ACS Sustainable Chemistry and Engineering, 2016, 4, 6940-6950.	6.7	235
3	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, 14646-14651.	7.1	149
4	Fungal cellulases and complexed cellulosomal enzymes exhibit synergistic mechanisms in cellulose deconstruction. Energy and Environmental Science, 2013, 6, 1858.	30.8	128
5	Predicting Enzyme Adsorption to Lignin Films by Calculating Enzyme Surface Hydrophobicity. Journal of Biological Chemistry, 2014, 289, 20960-20969.	3.4	116
6	Dramatic performance of Clostridium thermocellum explained by its wide range of cellulase modalities. Science Advances, 2016, 2, e1501254.	10.3	99
7	The O-Glycosylated Linker from the Trichoderma reesei Family 7 Cellulase Is a Flexible, Disordered Protein. Biophysical Journal, 2010, 99, 3773-3781.	0.5	96
8	Alkaline Pretreatment of Switchgrass. ACS Sustainable Chemistry and Engineering, 2015, 3, 1479-1491.	6.7	94
9	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, 7612-7617.	7.1	85
10	Replacement of histone H3 with CENP-A directs global nucleosome array condensation and loosening of nucleosome superhelical termini. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 16588-16593.	7.1	84
11	Lignin depolymerization by fungal secretomes and a microbial sink. Green Chemistry, 2016, 18, 6046-6062.	9.0	84
12	Engineering plant cell walls: tuning lignin monomer composition for deconstructable biofuel feedstocks or resilient biomaterials. Green Chemistry, 2014, 16, 2627.	9.0	60
13	Mechanisms employed by cellulase systems to gain access through the complex architecture of lignocellulosic substrates. Current Opinion in Chemical Biology, 2015, 29, 100-107.	6.1	49
14	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.	6.7	35
15	Determinants of Histone H4 N-terminal Domain Function during Nucleosomal Array Oligomerization. Journal of Biological Chemistry, 2009, 284, 16716-16722.	3.4	32
16	Molecular-scale features that govern the effects of O-glycosylation on a carbohydrate-binding module. Chemical Science, 2015, 6, 7185-7189.	7.4	30
17	Multiscale Characterization of Lignocellulosic Biomass Variability and Its Implications to Preprocessing and Conversion: a Case Study for Corn Stover. ACS Sustainable Chemistry and Engineering, 2020, 8, 3218-3230.	6.7	28
18	Engineered yeast tolerance enables efficient production from toxified lignocellulosic feedstocks. Science Advances, 2021, 7, .	10.3	21

#	Article	IF	Citations
19	Oâ€glycosylation effects on family 1 carbohydrateâ€binding module solution structures. FEBS Journal, 2015, 282, 4341-4356.	4.7	18
20	Throughput, Reliability, and Yields of a Pilot-Scale Conversion Process for Production of Fermentable Sugars from Lignocellulosic Biomass: A Study on Feedstock Ash and Moisture. ACS Sustainable Chemistry and Engineering, 2020, 8, 2008-2015.	6.7	16
21	In vitro chromatin self-association and its relevance to genome architectureThis paper is one of a selection of papers published in this Special Issue, entitled 27th International West Coast Chromatin and Chromosome Conference, and has undergone the Journal's usual peer review process.. Biochemistry and Cell Biology, 2006, 84, 411-417.	2.0	15
22	Impacts of Inorganic Material (Total Ash) on Surface Energy, Wettability, and Cohesion of Corn Stover. ACS Sustainable Chemistry and Engineering, 2020, 8, 2061-2072.	6.7	13
23	Interrelationships between cellulase activity and cellulose particle morphology. Cellulose, 2016, 23, 2349-2361.	4.9	8
24	Computationally Designed Peptide Inhibitors of the Ubiquitin E3 Ligase SCF^{Fbx4}. ChemBioChem, 2013, 14, 445-451.	2.6	7
25	Analysis, Impacts, and Solutions to Biomass Variability for Production of Fuels and Value-Added Products. ACS Sustainable Chemistry and Engineering, 2020, 8, 15375-15377.	6.7	4
26	Editorial overview: Energy: Prospects for fuels and chemicals from a biomass-based biorefinery using post-genomic chemical biology tools. Current Opinion in Chemical Biology, 2015, 29, v-vii.	6.1	2
27	Response to Comment on â€œRevealing Natureâ€™s Cellulase Diversity: The Digestion Mechanism of Caldicellulosiruptor bescii CelAâ€• Science, 2014, 344, 578-578.	12.6	1