Heather B Mayes

List of Publications by Year
in descending order

22 papers	1,826 citations	516710 16 h-index	713466 21 g-index
24 all docs	24 docs citations	24 times ranked	2396 citing authors

#	Article	IF	Citations
1	Bioconversion of wastewater-derived cresols to methyl muconic acids for use in performance-advantaged bioproducts. Green Chemistry, 2022, 24, 3677-3688.	9.0	4
2	Redesigned Hybrid Nylons with Optical Clarity and Chemical Recyclability. Journal of the American Chemical Society, 2022, 144, 5366-5376.	13.7	53
3	Click-Chemistry-Based Free Azide versus Azido Sugar Detection Enables Rapid In Vivo Screening of Glycosynthase Activity. ACS Chemical Biology, 2021, 16, 2490-2501.	3.4	4
4	A temperature-sensitive FERONIA mutant allele that alters root hair growth. Plant Physiology, 2021, 185, 405-423.	4.8	22
5	Biochemical and Genetic Analysis Identify CSLD3 as a beta-1,4-Glucan Synthase That Functions during Plant Cell Wall Synthesis. Plant Cell, 2020, 32, 1749-1767.	6.6	49
6	Mechanism of oligosaccharide synthesis via a mutant GH29 fucosidase. Reaction Chemistry and Engineering, 2019, 4, 402-409.	3.7	10
7	Best Practices for Foundations in Molecular Simulations [Article v1.0]. Living Journal of Computational Molecular Science, 2019, 1, .	6.4	105
8	Advantages of a distant cellulase catalytic base. Journal of Biological Chemistry, 2018, 293, 4680-4687.	3.4	5
9	Multiscale Kinetic Modeling Reveals an Ensemble of Cl^{â€“}/H⁺ Exchange Pathways in ClC-ec1 Antiporter. Journal of the American Chemical Society, 2018, 140, 1793-1804.	13.7	39
10	The Origin of Coupled Chloride and Proton Transport in a Cl - /H + Antiporter. Biophysical Journal, 2017, 112, 254a-255a.	0.5	0
11	The Origin of Coupled Chloride and Proton Transport in a Cl^{â€“}/H⁺ Antiporter. Journal of the American Chemical Society, 2016, 138, 14923-14930.	13.7	41
12	Fast pyrolysis of glucoseâ€based carbohydrates with added NaCl part 2: Validation and evaluation of the mechanistic model. AICHE Journal, 2016, 62, 778-791.	3.6	44
13	Who's on base? Revealing the catalytic mechanism of inverting family 6 glycoside hydrolases. Chemical Science, 2016, 7, 5955-5968.	7.4	27
14	Fast pyrolysis of glucoseâ€based carbohydrates with added NaCl part 1: Experiments and development of a mechanistic model. AICHE Journal, 2016, 62, 766-777.	3.6	57
15	Fungal Cellulases. Chemical Reviews, 2015, 115, 1308-1448.	47.7	673
16	The Alphaâ€“Bet(a) of Salty Glucose Pyrolysis: Computational Investigations Reveal Carbohydrate Pyrolysis Catalytic Action by Sodium Ions. ACS Catalysis, 2015, 5, 192-202.	11.2	56
17	Sodium Ion Interactions with Aqueous Glucose: Insights from Quantum Mechanics, Molecular Dynamics, and Experiment. Journal of Physical Chemistry B, 2014, 118, 1990-2000.	2.6	49
18	The Alphaâ€“Bet(a) of Glucose Pyrolysis: Computational and Experimental Investigations of 5-Hydroxymethylfurfural and Levoglucosan Formation Reveal Implications for Cellulose Pyrolysis. ACS Sustainable Chemistry and Engineering, 2014, 2, 1461-1473.	6.7	113

#	Article	IF	Citations
19	Experimental and Mechanistic Modeling of Fast Pyrolysis of Neat Glucose-Based Carbohydrates. 1. Experiments and Development of a Detailed Mechanistic Model. Industrial & Engineering Chemistry Research, 2014, 53, 13274-13289.	3.7	160
20	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, 1008-1022.	13.7	134
21	Energy: Fuelling the future. Nature, 2013, 502, S60-S61.	27.8	3
22	Unraveling the Reactions that Unravel Cellulose. Journal of Physical Chemistry A, 2012, 116, 7098-7106.	2.5	176