Koen Beerens

List of Publications by Year
in descending order

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Version: 2024-02-01

32	811	623188	525886
papers	citations	14	27
		h-index	g-index

33	33	33	996
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Metabolism and Health Effects of Rare Sugars in a CACO-2/HepG2 Coculture Model. Nutrients, 2022, 14, 611.	1.7	5
2	Sweet Biotechnology: Enzymatic Production and Digestibility Screening of Novel Kojibiose and Nigerose Analogues. Journal of Agricultural and Food Chemistry, 2022, 70, 3502-3511.	2.4	2
3	Nucleotide sugar dehydratases: Structure, mechanism, substrate specificity, and application potential. Journal of Biological Chemistry, 2022, 298, 101809.	1.6	9
4	Expanding the Enzyme Repertoire for Sugar Nucleotide Epimerization: the CDP-Tyvelose 2-Epimerase from Thermodesulfatator atlanticus for Glucose/Mannose Interconversion. Applied and Environmental Microbiology, 2021, 87, .	1.4	5
5	Stereo-electronic control of reaction selectivity in short-chain dehydrogenases: Decarboxylation, epimerization, and dehydration. Current Opinion in Chemical Biology, 2021, 61, 43-52.	2.8	14
6	Î²-Glucan phosphorylases in carbohydrate synthesis. Applied Microbiology and Biotechnology, 2021, 105, 4073-4087.	1.7	10
7	Structure-function relationships in NDP-sugar active SDR enzymes: Fingerprints for functional annotation and enzyme engineering. Biotechnology Advances, 2021, 48, 107705.	6.0	17
8	Engineering of a Thermostable Biocatalyst for the Synthesis of 2â€Oâ€Glucosylglycerol. ChemBioChem, 2021, 22, 2777-2782.	1.3	9
9	Exploration of GH94 Sequence Space for Enzyme Discovery Reveals a Novel Glucosylgalactose Phosphorylase Specificity. ChemBioChem, 2021, 22, 3319-3325.	1.3	6
10	GDP-Mannose 3,5-Epimerase: A View on Structure, Mechanism, and Industrial Potential. Frontiers in Molecular Biosciences, 2021, 8, 784142.	1.6	9
11	GDP-altrose as novel product of GDP-mannose 3,5-epimerase: Revisiting its reaction mechanism. International Journal of Biological Macromolecules, 2020, 165, 1862-1868.	3.6	5
12	Determinants of the Nucleotide Specificity in the Carbohydrate Epimerase Family 1. Biotechnology Journal, 2020, 15, e2000132.	1.8	6
13	Engineering of cellobiose phosphorylase for the defined synthesis of cellotriose. Applied Microbiology and Biotechnology, 2020, 104, 8327-8337.	1.7	15
14	Synthesis, trehalase hydrolytic resistance and inhibition properties of 4- and 6-substituted trehalose derivatives. Journal of Enzyme Inhibition and Medicinal Chemistry, 2020, 35, 1964-1989.	2.5	5
15	Oral Microbiota Display Profound Differential Metabolic Kinetics and Community Shifts upon Incubation with Sucrose, Trehalose, Kojibiose, and Xylitol. Applied and Environmental Microbiology, 2020, 86, .	1.4	11
16	Novel Insights into the Existence of the Putative UDP-Glucuronate 5-Epimerase Specificity. Catalysts, 2020, 10, 222.	1.6	4
17	Characterization of the First Bacterial and Thermostable GDP-Mannose 3,5-Epimerase. International Journal of Molecular Sciences, 2019, 20, 3530.	1.8	14
18	Rational design of an improved transglucosylase for production of the rare sugar nigerose. Chemical Communications, 2019, 55, 4531-4533.	2.2	26

#	Article	IF	Citations
19	Molecular Gating of an Engineered Enzyme Captured in Real Time. Journal of the American Chemical Society, 2018, 140, 17999-18008.	6.6	25
20	Converting Galactose into the Rare Sugar Talose with Cellobiose 2-Epimerase as Biocatalyst. Molecules, 2018, 23, 2519.	1.7	17
21	Evolutionary Analysis As a Powerful Complement to Energy Calculations for Protein Stabilization. ACS Catalysis, 2018, 8, 9420-9428.	5.5	20
22	Thermostable alpha-glucan phosphorylases: characteristics and industrial applications. Applied Microbiology and Biotechnology, 2018, 102, 8187-8202.	1.7	20
23	Disulfide bridges as essential elements for the thermostability of lytic polysaccharide monooxygenase LPMO10C from Streptomyces coelicolor. Protein Engineering, Design and Selection, 2017, 30, 401-408.	1.0	29
24	The â€œepimerringâ€•highlights the potential of carbohydrate epimerases for rare sugar production. Biocatalysis and Biotransformation, 2017, 35, 230-237.	1.1	13
25	Exploration of Protein Unfolding by Modelling Calorimetry Data from Reheating. Scientific Reports, 2017, 7, 16321.	1.6	39
26	Biocatalytic Synthesis of the Rare Sugar Kojibiose: Process Scale-Up and Application Testing. Journal of Agricultural and Food Chemistry, 2017, 65, 6030-6041.	2.4	40
27	UDP-hexose 4-epimerases: a view on structure, mechanism andÂsubstrate specificity. Carbohydrate Research, 2015, 414, 8-14.	1.1	55
28	Site-Specific Analysis of Protein Hydration Based on Unnatural Amino Acid Fluorescence. Journal of the American Chemical Society, 2015, 137, 4988-4992.	6.6	25
29	A structural classification of carbohydrate epimerases: From mechanistic insights to practical applications. Biotechnology Advances, 2015, 33, 1814-1828.	6.0	42
30	FireProt: Energy- and Evolution-Based Computational Design of Thermostable Multiple-Point Mutants. PLoS Computational Biology, 2015, 11, e1004556.	1.5	144
31	Characterization and mutational analysis of the UDP-Glc(NAc) 4-epimerase from Marinithermus hydrothermalis. Applied Microbiology and Biotechnology, 2013, 97, 7733-7740.	1.7	13
32	Enzymes for the biocatalytic production of rare sugars. Journal of Industrial Microbiology and Biotechnology, 2012, 39, 823-834.	1.4	157