Isabelle AndrÃ©

List of Publications by Year
in descending order

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Version: 2024-02-01

52	2,200	331670	223800
papers	citations	21	46
		h-index	g-index

52	52	52	2431
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Combination of High-Resolution Multistage Ion Mobility and Tandem MS with High Energy of Activation to Resolve the Structure of Complex Chemoenzymatically Synthesized Glycans. Analytical Chemistry, 2022, 94, 2279-2287.	6.5	4
2	The covalent complex of Jo-In results from a long-lived, non-covalent intermediate state with near-native structure. Biochemical and Biophysical Research Communications, 2022, 589, 223-228.	2.1	0
3	A Single Hydrogen Bond Controls the Selectivity of Transglycosylation vs Hydrolysis in Family 13 Glycoside Hydrolases. Journal of Physical Chemistry Letters, 2022, 13, 5626-5632.	4.6	4
4	Convergent Chemoenzymatic Strategy to Deliver a Diversity of Shigella flexneri Serotype-Specific O-Antigen Segments from a Unique Lightly Protected Tetrasaccharide Core. Journal of Organic Chemistry, 2021, 86, 2058-2075.	3.2	13
5	Redirecting substrate regioselectivity using engineered Î”N123-GBD-CD2 branching sucrases for the production of pentasaccharide repeating units of S. flexneri 3a, 4a and 4b haptens. Scientific Reports, 2021, 11, 2474.	3.3	6
6	Probing the determinants of the transglycosylation/hydrolysis partition in a retaining Î±-l-arabinofuranosidase. New Biotechnology, 2021, 62, 68-78.	4.4	12
7	Surface charge distribution: a key parameter for understanding protein behavior in chromatographic processes. Journal of Chromatography A, 2021, 1648, 462151.	3.7	4
8	Synthesis of Î±-l-Araf and Î²-d-Galf series furanobiosides using mutants of a GH51 Î±-l-arabinofuranosidase. Bioorganic Chemistry, 2021, 116, 105245.	4.1	2
9	Computer-aided engineering of a branching sucrase for the glucodiversification of a tetrasaccharide precursor of S. flexneri antigenic oligosaccharides. Scientific Reports, 2021, 11, 20294.	3.3	3
10	Understanding adsorption behavior of Î±-chymotrypsin onto cation exchanger using all-atom molecular dynamics simulations. Journal of Chromatography A, 2020, 1614, 460720.	3.7	3
11	Creation of (R)-Amine Transaminase Activity within an Î±-Amino Acid Transaminase Scaffold. ACS Chemical Biology, 2020, 15, 416-424.	3.4	24
12	An engineered PET depolymerase to break down and recycle plastic bottles. Nature, 2020, 580, 216-219.	27.8	913
13	Harnessing glycoenzyme engineering for synthesis of bioactive oligosaccharides. Interface Focus, 2019, 9, 20180069.	3.0	37
14	Neutral Genetic Drift-Based Engineering of a Sucrose-Utilizing Enzyme toward Glycodiversification. ACS Catalysis, 2019, 9, 1241-1252.	11.2	15
15	Enzyme Active Site Loop Revealed as a Gatekeeper for Cofactor Flip by Targeted Molecular Dynamics Simulations and FRET-Based Kinetics. ACS Catalysis, 2019, 9, 1337-1346.	11.2	6
16	Engineering a branching sucrase for flavonoid glucoside diversification. Scientific Reports, 2018, 8, 15153.	3.3	15
17	Combining multi-scale modelling methods to decipher molecular motions of a branching sucrase from glycoside-hydrolase family 70. PLoS ONE, 2018, 13, e0201323.	2.5	4
18	A generic HTS assay for kinase screening: Validation for the isolation of an engineered malate kinase. PLoS ONE, 2018, 13, e0193036.	2.5	3

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19	Construction of a synthetic metabolic pathway for biosynthesis of the non-natural methionine precursor 2,4-dihydroxybutyric acid. Nature Communications, 2017, 8, 15828.	12.8	50
20	Engineering of anp efficient mutant of Neisseria polysaccharea amylosucrase for the synthesis of controlled size maltooligosaccharides. Carbohydrate Polymers, 2017, 173, 403-411.	10.2	7
21	Novel product specificity toward erlose and panose exhibited by multisite engineered mutants of amylosucrase. Protein Science, 2017, 26, 566-577.	7.6	7
22	Engineering of Candida antarctica lipase B for poly(Îµ-caprolactone) synthesis. European Polymer Journal, 2017, 95, 809-819.	5.4	17
23	GH13 amylosucrases and GH70 branching sucrases, atypical enzymes in their respective families. Cellular and Molecular Life Sciences, 2016, 73, 2661-2679.	5.4	44
24	An Atomistic Statistically Effective Energy Function for Computational Protein Design. Journal of Chemical Theory and Computation, 2016, 12, 4146-4168.	5.3	11
25	Programmed chemo-enzymatic synthesis of the oligosaccharide component of a carbohydrate-based antibacterial vaccine candidate. Chemical Communications, 2015, 51, 2581-2584.	4.1	20
26	Computer-Aided Engineering of a Transglycosylase for the Glucosylation of an Unnatural Disaccharide of Relevance for Bacterial Antigen Synthesis. ACS Catalysis, 2015, 5, 1186-1198.	11.2	26
27	Investigation on the Synthesis of Shigella flexneri Specific Oligosaccharides Using Disaccharides as Potential Transglucosylase Acceptor Substrates. Journal of Organic Chemistry, 2015, 80, 11237-11257.	3.2	6
28	Extending the Structural Diversity of Î±â€Flavonoid Glycosides with Engineered Glucansucrases. ChemCatChem, 2014, 6, 2282-2291.	3.7	28
29	CAZyme discovery and design for sweet dreams. Current Opinion in Chemical Biology, 2014, 19, 17-24.	6.1	74
30	Essential role of amino acid position 226 in oligosaccharide elongation by amylosucrase from Neisseria polysaccharea. Biotechnology and Bioengineering, 2014, 111, 1719-1728.	3.3	15
31	Chapter 28. Successes in engineering glucansucrases to enhance glycodiversification. Carbohydrate Chemistry, 2014, , 624-645.	0.3	12
32	Adaptive Smith-Waterman residue match seeding for protein structural alignment. Proteins: Structure, Function and Bioinformatics, 2013, 81, 1823-1839.	2.6	2
33	Probing Substrate Promiscuity of Amylosucrase from Neisseria polysaccharea. ChemCatChem, 2013, 5, 2288-2295.	3.7	19
34	Probing impact of active site residue mutations on stability and activity of Neisseria polysaccharea amylosucrase. Protein Science, 2013, 22, 1754-1765.	7.6	23
35	Combinatorial Engineering of Dextransucrase Specificity. PLoS ONE, 2013, 8, e77837.	2.5	18
36	Functional roles of H98 and W99 and Î²2Î±2 loop dynamics in the Î±â€<scp>l</scp>â€arabinofuranosidase from Thermobacillusâ€ƒxylanilyticus. FEBS Journal, 2012, 279, 3598-3611.	4.7	15

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37	Structural Investigation of the Thermostability and Product Specificity of Amylosucrase from the Bacterium Deinococcus geothermalis. Journal of Biological Chemistry, 2012, 287, 6642-6654.	3.4	55
38	Sucrose analogs: an attractive (bio)source for glycodiversification. Natural Product Reports, 2012, 29, 945.	10.3	40
39	Applying Pairwise Combinations of Amino Acid Mutations for Sorting Out Highly Efficient Glucosylation Tools for Chemo-Enzymatic Synthesis of Bacterial Oligosaccharides. Journal of the American Chemical Society, 2012, 134, 18677-18688.	13.7	48
40	A mixed molecular modelingâ€robotics approach to investigate lipase large molecular motions. Proteins: Structure, Function and Bioinformatics, 2011, 79, 2517-2529.	2.6	17
41	A pH-Based High-Throughput Screening of Sucrose-Utilizing Transglucosidases for the Development of Enzymatic Glucosylation Tools. ChemCatChem, 2010, 2, 969-975.	3.7	8
42	Exploring the Conformational States and Rearrangements of Yarrowia lipolytica Lipase. Biophysical Journal, 2010, 99, 2225-2234.	0.5	96
43	New Efficient Recombinant Expression System To Engineer Candida antarctica Lipase B. Applied and Environmental Microbiology, 2010, 76, 2684-2687.	3.1	44
44	Transglucosidases as efficient tools for oligosaccharide and glucoconjugate synthesis. Current Opinion in Microbiology, 2010, 13, 293-300.	5.1	61
45	Sucrose-Utilizing Transglucosidases for Biocatalysis. Topics in Current Chemistry, 2010, 294, 25-48.	4.0	48
46	Control of Lipase Enantioselectivity by Engineering the Substrate Binding Site and Access Channel. ChemBioChem, 2009, 10, 2760-2771.	2.6	46
47	Insights into lid movements of Burkholderia cepacia lipase inferred from molecular dynamics simulations. Proteins: Structure, Function and Bioinformatics, 2009, 77, 509-523.	2.6	88
48	Design of Î±-Transglucosidases of Controlled Specificity for Programmed Chemoenzymatic Synthesis of Antigenic Oligosaccharides. Journal of the American Chemical Society, 2009, 131, 7379-7389.	13.7	64
49	Synthesis of L-Rhamnose and N -Acetyl-D-Glucosamine Derivatives Entering in the Composition of Bacterial Polysaccharides by Use of Glucansucrases. Journal of Carbohydrate Chemistry, 2009, 28, 142-160.	1.1	14
50	Combinatorial engineering to enhance thermostability of amylosucrase. Protein Science, 2008, 17, 967-976.	7.6	33
51	Cloning, purification and characterization of a thermostable amylosucrase fromDeinococcus geothermalis. FEMS Microbiology Letters, 2008, 285, 25-32.	1.8	41
52	A Structureâ€Controlled Investigation of Lipase Enantioselectivity by a Pathâ€Planning Approach. ChemBioChem, 2008, 9, 1308-1317.	2.6	35