Isabelle AndrÃ©

List of Publications by Year
in descending order

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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	An engineered PET depolymerase to break down and recycle plastic bottles. Nature, 2020, 580, 216-219.	27.8	913
2	Exploring the Conformational States and Rearrangements of Yarrowia lipolytica Lipase. Biophysical Journal, 2010, 99, 2225-2234.	0.5	96
3	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
4	CAZyme discovery and design for sweet dreams. Current Opinion in Chemical Biology, 2014, 19, 17-24.	6.1	74
5	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
6	Transglucosidases as efficient tools for oligosaccharide and glucoconjugate synthesis. Current Opinion in Microbiology, 2010, 13, 293-300.	5.1	61
7	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
8	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
9	Sucrose-Utilizing Transglucosidases for Biocatalysis. Topics in Current Chemistry, 2010, 294, 25-48.	4.0	48
10	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
11	Control of Lipase Enantioselectivity by Engineering the Substrate Binding Site and Access Channel. ChemBioChem, 2009, 10, 2760-2771.	2.6	46
12	New Efficient Recombinant Expression System To Engineer Candida antarctica Lipase B. Applied and Environmental Microbiology, 2010, 76, 2684-2687.	3.1	44
13	GH13 amylosucrases and GH70 branching sucrases, atypical enzymes in their respective families. Cellular and Molecular Life Sciences, 2016, 73, 2661-2679.	5.4	44
14	Cloning, purification and characterization of a thermostable amylosucrase fromDeinococcus geothermalis. FEMS Microbiology Letters, 2008, 285, 25-32.	1.8	41
15	Sucrose analogs: an attractive (bio)source for glycodiversification. Natural Product Reports, 2012, 29, 945.	10.3	40
16	Harnessing glycoenzyme engineering for synthesis of bioactive oligosaccharides. Interface Focus, 2019, 9, 20180069.	3.0	37
17	A Structureâ€Controlled Investigation of Lipase Enantioselectivity by a Pathâ€Planning Approach. ChemBioChem, 2008, 9, 1308-1317.	2.6	35
18	Combinatorial engineering to enhance thermostability of amylosucrase. Protein Science, 2008, 17, 967-976.	7.6	33

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19	Extending the Structural Diversity of Î±â€Flavonoid Glycosides with Engineered Glucansucrases. ChemCatChem, 2014, 6, 2282-2291.	3.7	28
20	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
21	Creation of (R)-Amine Transaminase Activity within an Î±-Amino Acid Transaminase Scaffold. ACS Chemical Biology, 2020, 15, 416-424.	3.4	24
22	Probing impact of active site residue mutations on stability and activity of Neisseria polysaccharea amylosucrase. Protein Science, 2013, 22, 1754-1765.	7.6	23
23	Programmed chemo-enzymatic synthesis of the oligosaccharide component of a carbohydrate-based antibacterial vaccine candidate. Chemical Communications, 2015, 51, 2581-2584.	4.1	20
24	Probing Substrate Promiscuity of Amylosucrase from Neisseria polysaccharea. ChemCatChem, 2013, 5, 2288-2295.	3.7	19
25	Combinatorial Engineering of Dextransucrase Specificity. PLoS ONE, 2013, 8, e77837.	2.5	18
26	A mixed molecular modelingâ€robotics approach to investigate lipase large molecular motions. Proteins: Structure, Function and Bioinformatics, 2011, 79, 2517-2529.	2.6	17
27	Engineering of Candida antarctica lipase B for poly(Îµ-caprolactone) synthesis. European Polymer Journal, 2017, 95, 809-819.	5.4	17
28	Functional roles of H98 and W99 and Î²2Î±2 loop dynamics in the Î±â€<scp>l</scp>â€arabinofuranosidase from Thermobacillusâ€xylanilyticus. FEBS Journal, 2012, 279, 3598-3611.	4.7	15
29	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
30	Engineering a branching sucrase for flavonoid glucoside diversification. Scientific Reports, 2018, 8, 15153.	3.3	15
31	Neutral Genetic Drift-Based Engineering of a Sucrose-Utilizing Enzyme toward Glycodiversification. ACS Catalysis, 2019, 9, 1241-1252.	11.2	15
32	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
33	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
34	Probing the determinants of the transglycosylation/hydrolysis partition in a retaining Î±-l-arabinofuranosidase. New Biotechnology, 2021, 62, 68-78.	4.4	12
35	Chapter 28. Successes in engineering glucansucrases to enhance glycodiversification. Carbohydrate Chemistry, 2014, , 624-645.	0.3	12
36	An Atomistic Statistically Effective Energy Function for Computational Protein Design. Journal of Chemical Theory and Computation, 2016, 12, 4146-4168.	5.3	11

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37	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
38	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
39	Novel product specificity toward erlose and panose exhibited by multisite engineered mutants of amylosucrase. Protein Science, 2017, 26, 566-577.	7.6	7
40	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
41	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
42	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
43	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
44	Surface charge distribution: a key parameter for understanding protein behavior in chromatographic processes. Journal of Chromatography A, 2021, 1648, 462151.	3.7	4
45	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
46	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
47	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
48	A generic HTS assay for kinase screening: Validation for the isolation of an engineered malate kinase. PLoS ONE, 2018, 13, e0193036.	2.5	3
49	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
50	Adaptive Smith-Waterman residue match seeding for protein structural alignment. Proteins: Structure, Function and Bioinformatics, 2013, 81, 1823-1839.	2.6	2
51	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
52	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