Claire Moulis

List of Publications by Year
in descending order

50 papers	1,284 citations	331670 21 h-index	377865 34 g-index
50 all docs	50 docs citations	50 times ranked	1149 citing authors

#	ARTICLE	IF	CITATIONS
1	Understanding the Polymerization Mechanism of Glycoside-Hydrolase Family 70 Glucansucrases. Journal of Biological Chemistry, 2006, 281, 31254-31267.	3.4	119
2	CAZyme discovery and design for sweet dreams. Current Opinion in Chemical Biology, 2014, 19, 17-24.	6.1	74
3	Exopolysaccharide (EPS) Synthesis by Oenococcus oeni: From Genes to Phenotypes. PLoS ONE, 2014, 9, e98898.	2.5	65
4	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
5	The stability of an mRNA is influenced by its concentration: a potential physical mechanism to regulate gene expression. Nucleic Acids Research, 2017, 45, 11711-11724.	14.5	64
6	Characterization of a novel dextransucrase from Weissella confusa isolated from sourdough. Applied Microbiology and Biotechnology, 2013, 97, 5413-5422.	3.6	60
7	Inventory of the <scp>GH</scp>70 enzymes encoded by <i>LeuconostocÂcitreum </i><scp>NRRL</scp> Bâ€1299 â€“ identification of three novel Î±â€transglucosylases. FEBS Journal, 2015, 282, 2115-2130.	4.7	49
8	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
9	Characterization of the First Î±-(1â†’3) Branching Sucrases of the GH70 Family. Journal of Biological Chemistry, 2016, 291, 7687-7702.	3.4	45
10	GH13 amylosucrases and GH70 branching sucrases, atypical enzymes in their respective families. Cellular and Molecular Life Sciences, 2016, 73, 2661-2679.	5.4	44
11	Investigations on the Determinants Responsible for Low Molar Mass Dextran Formation by DSR-M Dextransucrase. ACS Catalysis, 2017, 7, 7106-7119.	11.2	37
12	Harnessing glycoenzyme engineering for synthesis of bioactive oligosaccharides. Interface Focus, 2019, 9, 20180069.	3.0	37
13	Synthesis of dextrans with controlled amounts of Î±-1,2 linkages using the transglucosidase GBDâ€“CD2. Applied Microbiology and Biotechnology, 2010, 86, 545-554.	3.6	33
14	High-level production and purification of a fully active recombinant dextransucrase fromLeuconostoc mesenteroidesNRRL B-512F. FEMS Microbiology Letters, 2006, 261, 203-210.	1.8	28
15	NMR-Based Structural Glycomics for High-Throughput Screening of Carbohydrate-Active Enzyme Specificity. Analytical Chemistry, 2011, 83, 1202-1206.	6.5	28
16	Deciphering an Undecided Enzyme: Investigations of the Structural Determinants Involved in the Linkage Specificity of Alternansucrase. ACS Catalysis, 2019, 9, 2222-2237.	11.2	27
17	Structure and Property Engineering of Î±-<scp>d</scp>-Glucans Synthesized by Dextransucrase Mutants. Biomacromolecules, 2012, 13, 187-195.	5.4	26
18	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

#	Article	IF	Citations
19	A dextran with unique rheological properties produced by the dextransucrase from Oenococcus kitaharae DSM 17330. Carbohydrate Polymers, 2018, 179, 10-18.	10.2	26
20	Genome Sequence of Weissella confusa LBAE C39-2, Isolated from a Wheat Sourdough. Journal of Bacteriology, 2012, 194, 1608-1609.	2.2	25
21	Genome Sequences of Three Leuconostoc citreum Strains, LBAE C10, LBAE C11, and LBAE E16, Isolated from Wheat Sourdoughs. Journal of Bacteriology, 2012, 194, 1610-1611.	2.2	22
22	Evaluation of dough rheological properties and bread texture of pearl millet-wheat flour mix. Journal of Food Science and Technology, 2016, 53, 2061-2066.	2.8	22
23	Isolation of a Gene from Leuconostoc citreum B/110-1-2 Encoding a Novel Dextransucrase Enzyme. Current Microbiology, 2011, 62, 1260-1266.	2.2	19
24	Natural and engineered transglycosylases: Green tools for the enzyme-based synthesis of glycoproducts. Current Opinion in Chemical Biology, 2021, 61, 96-106.	6.1	19
25	Bacterial Î±-Glucan and Branching Sucrases from GH70 Family: Discovery, Structureâ€"Function Relationship Studies and Engineering. Microorganisms, 2021, 9, 1607.	3.6	19
26	Understanding the Polymerization Mechanism of Glycoside-Hydrolase Family 70 Glucansucrases. Journal of Biological Chemistry, 2006, 281, 31254-31267.	3.4	19
27	One-step synthesis of isomalto-oligosaccharide syrups and dextrans of controlled size using engineered dextransucrase. Biocatalysis and Biotransformation, 2008, 26, 141-151.	2.0	18
28	Combinatorial Engineering of Dextransucrase Specificity. PLoS ONE, 2013, 8, e77837.	2.5	18
29	Enzymatic synthesis of polysaccharide-based copolymers. Green Chemistry, 2018, 20, 4012-4022.	9.0	16
30	Optimizing the production of an Î±-(1â†'2) branching sucrase in Escherichia coli using statistical design. Applied Microbiology and Biotechnology, 2014, 98, 5173-5184.	3.6	15
31	Engineering a branching sucrase for flavonoid glucoside diversification. Scientific Reports, 2018, 8, 15153.	3.3	15
32	Futile Encounter Engineering of the DSR-M Dextransucrase Modifies the Resulting Polymer Length. Biochemistry, 2019, 58, 2853-2859.	2.5	15
33	A novel dextransucrase is produced by Leuconostoc citreum strain B/110-1-2: an isolate used for the industrial production of dextran and dextran derivatives. Journal of Industrial Microbiology and Biotechnology, 2011, 38, 1499-1506.	3.0	13
34	Convergent Chemoenzymatic Strategy to Deliver a Diversity of <i>Shigella flexneri</i> Serotype-Specific O-Antigen Segments from a Unique Lightly Protected Tetrasaccharide Core. Journal of Organic Chemistry, 2021, 86, 2058-2075.	3.2	13
35	Search for a dextransucrase minimal motif involved in dextran binding. FEBS Letters, 2007, 581, 4675-4680.	2.8	12
36	Macromolecular structure and film properties of enzymatically-engineered high molar mass dextrans. Carbohydrate Polymers, 2018, 181, 337-344.	10.2	12

#	Article	IF	Citations
37	A laundry detergent compatible lichenase: Statistical optimization for production under solid state fermentation on crude millet. Industrial Crops and Products, 2013, 43, 349-354.	5.2	11
38	Overview of the glucansucrase equipment of Leuconostoc citreum LBAE-E16 and LBAE-C11, two strains isolated from sourdough. FEMS Microbiology Letters, 2015, 362, 1-8.	1.8	11
39	A specific oligosaccharide-binding site in the alternansucrase catalytic domain mediates alternan elongation. Journal of Biological Chemistry, 2020, 295, 9474-9489.	3.4	9
40	Processivity of dextransucrases synthesizing very-high-molar-mass dextran is mediated by sugar-binding pockets in domain V. Journal of Biological Chemistry, 2020, 295, 5602-5613.	3.4	9
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	Complete Genome Sequence of Leuconostoc citreum Strain NRRL B-742. Genome Announcements, 2014, 2, .	0.8	8
43	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
44	Novel product specificity toward erlose and panose exhibited by multisite engineered mutants of amylosucrase. Protein Science, 2017, 26, 566-577.	7.6	7
45	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
46	An eco-design approach for an innovative production process of low molar mass dextran. Green Chemistry, 2019, 21, 4512-4531.	9.0	5
47	Glucansucrases of GH family 70: What are the determinants of their specifities?. Biocatalysis and Biotransformation, 2006, 24, 137-145.	2.0	4
48	A highly thermostable lichenase from Bacillus sp. UEB-S: Biochemical and molecular characterization. Journal of Molecular Catalysis B: Enzymatic, 2015, 115, 8-12.	1.8	4
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	The role of the C domain in the thermostability of GH70 enzymes investigated by domain swapping. Amylase, 2022, 6, 11-19.	1.6	0