Sarah Morais

List of Publications by Year
in descending order

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53 papers	2,145 citations	218677 26 h-index	243625 44 g-index
55 all docs	55 docs citations	55 times ranked	2003 citing authors

#	Article	IF	Citations
1	Cellulosomes: bacterial nanomachines for dismantling plant polysaccharides. Nature Reviews Microbiology, 2017, 15, 83-95.	28.6	336
2	The rumen microbiome: balancing food security and environmental impacts. Nature Reviews Microbiology, 2021, 19, 553-566.	28.6	143
3	Ruminococcal cellulosome systems from rumen to human. Environmental Microbiology, 2015, 17, 3407-3426.	3.8	104
4	Cellulase-Xylanase Synergy in Designer Cellulosomes for Enhanced Degradation of a Complex Cellulosic Substrate. MBio, 2010, 1, .	4.1	99
5	Deconstruction of Lignocellulose into Soluble Sugars by Native and Designer Cellulosomes. MBio, 2012, 3, .	4.1	92
6	The Road Not Taken: The Rumen Microbiome, Functional Groups, and Community States. Trends in Microbiology, 2019, 27, 538-549.	7.7	92
7	Islands in the stream: from individual to communal fiber degradation in the rumen ecosystem. FEMS Microbiology Reviews, 2019, 43, 362-379.	8.6	88
8	Sporulation capability and amylosome conservation among diverse human colonic and rumen isolates of the keystone starchâ€degrader <i>Ruminococcus bromii</i>. Environmental Microbiology, 2018, 20, 324-336.	3.8	79
9	Toward combined delignification and saccharification of wheat straw by a laccase-containing designer cellulosome. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 10854-10859.	7.1	77
10	Enhanced cellulose degradation by nano-complexed enzymes: Synergism between a scaffold-linked exoglucanase and a free endoglucanase. Journal of Biotechnology, 2010, 147, 205-211.	3.8	67
11	Interplay between <i>Clostridium thermocellum</i> Family 48 and Family 9 Cellulases in Cellulosomal versus Noncellulosomal States. Applied and Environmental Microbiology, 2010, 76, 3236-3243.	3.1	64
12	Assembly of Xylanases into Designer Cellulosomes Promotes Efficient Hydrolysis of the Xylan Component of a Natural Recalcitrant Cellulosic Substrate. MBio, 2011, 2, .	4.1	62
13	Enzymatic profiling of cellulosomal enzymes from the human gut bacterium, <scp><i>R</i></scp><i>uminococcus champanellensis</i>, reveals a fineâ€tuned system for cohesinâ€dockerin recognition. Environmental Microbiology, 2016, 18, 542-556.	3.8	57
14	Contribution of a Xylan-Binding Module to the Degradation of a Complex Cellulosic Substrate by Designer Cellulosomes. Applied and Environmental Microbiology, 2010, 76, 3787-3796.	3.1	52
15	Adaptor Scaffoldins: An Original Strategy for Extended Designer Cellulosomes, Inspired from Nature. MBio, 2016, 7, e00083.	4.1	50
16	Enhancement of cellulosome-mediated deconstruction of cellulose by improving enzyme thermostability. Biotechnology for Biofuels, 2016, 9, 164.	6.2	49
17	Designer Cellulosomes for Enhanced Hydrolysis of Cellulosic Substrates. Methods in Enzymology, 2012, 510, 429-452.	1.0	43
18	Significance of Relative Position of Cellulases in Designer Cellulosomes for Optimized Cellulolysis. PLoS ONE, 2015, 10, e0127326.	2.5	43

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19	Establishment of a Simple Lactobacillus plantarum Cell Consortium for Cellulase-Xylanase Synergistic Interactions. Applied and Environmental Microbiology, 2013, 79, 5242-5249.	3.1	42
20	A combined cell-consortium approach for lignocellulose degradation by specialized Lactobacillus plantarumcells. Biotechnology for Biofuels, 2014, 7, 112.	6.2	40
21	Creation of a functional hyperthermostable designer cellulosome. Biotechnology for Biofuels, 2019, 12, 44.	6.2	39
22	Assembly of Synthetic Functional Cellulosomal Structures onto the Cell Surface of Lactobacillus plantarum, a Potent Member of the Gut Microbiome. Applied and Environmental Microbiology, 2018, 84, .	3.1	33
23	Broad phylogeny and functionality of cellulosomal components in the bovine rumen microbiome. Environmental Microbiology, 2017, 19, 185-197.	3.8	32
24	Complexity of the Ruminococcus flavefaciens FD-1 cellulosome reflects an expansion of family-related protein-protein interactions. Scientific Reports, 2017, 7, 42355.	3.3	31
25	Unique organization and unprecedented diversity of the Bacteroides (Pseudobacteroides) cellulosolvens cellulosome system. Biotechnology for Biofuels, 2017, 10, 211.	6.2	29
26	Functional Association of Catalytic and Ancillary Modules Dictates Enzymatic Activity in Glycoside Hydrolase Family 43 Î²-Xylosidase. Journal of Biological Chemistry, 2012, 287, 9213-9221.	3.4	28
27	Paradigmatic status of an endo- and exoglucanase and its effect on crystalline cellulose degradation. Biotechnology for Biofuels, 2012, 5, 78.	6.2	23
28	The Electrosome: A Surface-Displayed Enzymatic Cascade in a Biofuel Cellâ€™s Anode and a High-Density Surface-Displayed Biocathodic Enzyme. Nanomaterials, 2017, 7, 153.	4.1	21
29	Insights into the functionality and stability of designer cellulosomes at elevated temperatures. Applied Microbiology and Biotechnology, 2016, 100, 8731-8743.	3.6	20
30	The Cellulosome Paradigm in An Extreme Alkaline Environment. Microorganisms, 2019, 7, 347.	3.6	20
31	Lysozyme activity of the <scp><i>R</i></scp><i>uminococcus champanellensis</i> cellulosome. Environmental Microbiology, 2016, 18, 5112-5122.	3.8	19
32	Pan-Cellulosomics of Mesophilic Clostridia: Variations on a Theme. Microorganisms, 2017, 5, 74.	3.6	17
33	Concepts and Consequences of a Core Gut Microbiota for Animal Growth and Development. Annual Review of Animal Biosciences, 2022, 10, 177-201.	7.4	16
34	The cohesin module is a major determinant of cellulosome mechanical stability. Journal of Biological Chemistry, 2018, 293, 7139-7147.	3.4	15
35	Colocalization and Disposition of Cellulosomes in <i>Clostridium clariflavum</i> as Revealed by Correlative Superresolution Imaging. MBio, 2018, 9, .	4.1	15
36	Insights into enhanced thermostability of a cellulosomal enzyme. Carbohydrate Research, 2014, 389, 78-84.	2.3	12

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37	Glycosylation of hyperthermostable designer cellulosome components yields enhanced stability and cellulose hydrolysis. FEBS Journal, 2020, 287, 4370-4388.	4.7	11
38	Sas20 is a highly flexible starch-binding protein in the Ruminococcus bromii cell-surface amylosome. Journal of Biological Chemistry, 2022, 298, 101896.	3.4	11
39	Modular Organization of the Thermobifida fusca Exoglucanase Cel6B Impacts Cellulose Hydrolysis and Designer Cellulosome Efficiency. Biotechnology Journal, 2017, 12, 1700205.	3.5	9
40	Carbohydrate Depolymerization by Intricate Cellulosomal Systems. Methods in Molecular Biology, 2017, 1588, 93-116.	0.9	8
41	Impact of scaffoldin mechanostability on cellulosomal activity. Biomaterials Science, 2020, 8, 3601-3610.	5.4	7
42	Minimalistic Cellulosome of the Butanologenic Bacterium Clostridium saccharoperbutylacetonicum. MBio, 2020, 11, .	4.1	7
43	Structure and substrate recognition by the Ruminococcus bromii amylosome pullulanases. Journal of Structural Biology, 2021, 213, 107765.	2.8	7
44	Cell-surface display of designer cellulosomes by Lactobacillus plantarum. Methods in Enzymology, 2019, 617, 241-263.	1.0	6
45	Advanced Cloning Tools for Construction of Designer Cellulosomes. Methods in Molecular Biology, 2018, 1796, 135-151.	0.9	5
46	Rapid adaptation for fibre degradation by changes in plasmid stoichiometry within <i>Lactobacillus plantarum</i> at the synthetic community level. Microbial Biotechnology, 2020, 13, 1748-1764.	4.2	5
47	Nanoscale resolution of microbial fiber degradation in action. ELife, 0, 11, .	6.0	5
48	Combinatorial assembly and optimisation of designer cellulosomes: a galactomannan case study. , 2022, 15, .		4
49	Mapping the deformability of natural and designed cellulosomes in solution. , 2022, 15, .		4
50	Evaluation of Thermal Stability of Cellulosomal Hydrolases and Their Complex Formation. Methods in Molecular Biology, 2018, 1796, 153-166.	0.9	2
51	Affinity Electrophoresis as a Method for Determining Substrate-Binding Specificity of Carbohydrate-Active Enzymes for Soluble Polysaccharides. , 2012, 908, 119-127.		2
52	New Paradigms for Engineering Plant Cell Wall Degrading Enzymes. , 2015, , 129-149.		1
53	Methods for Discovery of Novel Cellulosomal Cellulases Using Genomics and Biochemical Tools. Methods in Molecular Biology, 2018, 1796, 67-84.	0.9	0