Jan-Hendrik Hehemann

List of Publications by Year
in descending order

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56	5,045	126708	143772
papers	citations	33 h-index	57 g-index

61	61	61	5685
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Verrucomicrobiota are specialist consumers of sulfated methyl pentoses during diatom blooms. ISME Journal, 2022, 16, 630-641.	4.4	62
2	Glycoside hydrolase from the GH76 family indicates that marine Salegentibacter sp. Hel_I_6 consumes alpha-mannan from fungi. ISME Journal, 2022, 16, 1818-1830.	4.4	8
3	Ion-exchange purification and structural characterization of five sulfated fucoidans from brown algae. Glycobiology, 2021, 31, 352-357.	1.3	18
4	Quantifying fluorescent glycan uptake to elucidate strain-level variability in foraging behaviors of rumen bacteria. Microbiome, 2021, 9, 23.	4.9	16
5	Diatom fucan polysaccharide precipitates carbon during algal blooms. Nature Communications, 2021, 12, 1150.	5.8	58
6	Changing expression patterns of TonB-dependent transporters suggest shifts in polysaccharide consumption over the course of a spring phytoplankton bloom. ISME Journal, 2021, 15, 2336-2350.	4.4	42
7	Structural Basis of Ligand Selectivity by a Bacterial Adhesin Lectin Involved in Multispecies Biofilm Formation. MBio, 2021, 12, .	1.8	7
8	Enigmatic persistence of dissolved organic matter in the ocean. Nature Reviews Earth & Environment, 2021, 2, 570-583.	12.2	84
9	A new carbohydrate-active oligosaccharide dehydratase is involved in the degradation of ulvan. Journal of Biological Chemistry, 2021, 297, 101210.	1.6	8
10	Secretion of sulfated fucans by diatoms may contribute to marine aggregate formation. Limnology and Oceanography, 2021, 66, 3768-3782.	1.6	16
11	Characterization of the GH16 and GH17 laminarinases from Vibrio breoganii 1C10. Applied Microbiology and Biotechnology, 2020, 104, 161-171.	1.7	15
12	Laminarin is a major molecule in the marine carbon cycle. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 6599-6607.	3.3	123
13	Plant speciesâ€specific recognition of long and short Î²â€1,3â€linked glucans is mediated by different receptor systems. Plant Journal, 2020, 102, 1142-1156.	2.8	50
14	Discrimination of Î²-1,4- and Î²-1,3-Linkages in Native Oligosaccharides via Charge Transfer Dissociation Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2020, 31, 1249-1259.	1.2	19
15	Verrucomicrobia use hundreds of enzymes to digest the algal polysaccharide fucoidan. Nature Microbiology, 2020, 5, 1026-1039.	5.9	182
16	Polysaccharide utilization loci of North Sea Flavobacteriia as basis for using SusC/D-protein expression for predicting major phytoplankton glycans. ISME Journal, 2019, 13, 76-91.	4.4	139
17	Biphasic cellular adaptations and ecological implications of Alteromonas macleodii degrading a mixture of algal polysaccharides. ISME Journal, 2019, 13, 92-103.	4.4	74
18	A marine bacterial enzymatic cascade degrades the algal polysaccharide ulvan. Nature Chemical Biology, 2019, 15, 803-812.	3.9	97

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19	FGB1 and WSC3 are in plantaâ€‹induced Î²â€‹glucanâ€‹binding fungal lectins with different functions. New Phytologist, 2019, 222, 1493-1506.	3.5	43
20	Single cell fluorescence imaging of glycan uptake by intestinal bacteria. ISME Journal, 2019, 13, 1883-1889.	4.4	28
21	Insights into the Îº/Î¹-carrageenan metabolism pathway of some marine Pseudoalteromonas species. Communications Biology, 2019, 2, 474.	2.0	54
22	Evolution of a Vegetarian Vibrio: Metabolic Specialization of Vibrio breoganii to Macroalgal Substrates. Journal of Bacteriology, 2018, 200, .	1.0	24
23	Oxidative demethylation of algal carbohydrates by cytochrome P450 monooxygenases. Nature Chemical Biology, 2018, 14, 342-344.	3.9	47
24	The Molecular Basis of Polysaccharide Sulfatase Activity and a Nomenclature for Catalytic Subsites in this Class of Enzyme. Structure, 2018, 26, 747-758.e4.	1.6	30
25	Specificity and mechanism of carbohydrate demethylation by cytochrome P450 monooxygenases. Biochemical Journal, 2018, 475, 3875-3886.	1.7	11
26	Alphaâ€‹and betaâ€‹mannan utilization by marine Bacteroidetes. Environmental Microbiology, 2018, 20, 4127-4140.	1.8	31
27	Molecular recognition of the betaâ€‹glucans laminarin and pustulan by a SusDâ€‹like glycanâ€‹binding protein of a marine Bacteroidetes. FEBS Journal, 2018, 285, 4465-4481.	2.2	13
28	Adaptive mechanisms that provide competitive advantages to marine bacteroidetes during microalgal blooms. ISME Journal, 2018, 12, 2894-2906.	4.4	84
29	Biochemical characterization of an ulvan lyase from the marine flavobacterium Formosa agariphila KMM 3901T. Applied Microbiology and Biotechnology, 2018, 102, 6987-6996.	1.7	41
30	Laminarin Quantification in Microalgae with Enzymes from Marine Microbes. Bio-protocol, 2018, 8, e2666.	0.2	6
31	Aquatic adaptation of a laterally acquired pectin degradation pathway in marine gammaproteobacteria. Environmental Microbiology, 2017, 19, 2320-2333.	1.8	57
32	Accurate Quantification of Laminarin in Marine Organic Matter with Enzymes from Marine Microbes. Applied and Environmental Microbiology, 2017, 83, .	1.4	75
33	Exploiting fine-scale genetic and physiological variation of closely related microbes to reveal unknown enzyme functions. Journal of Biological Chemistry, 2017, 292, 13056-13067.	1.6	18
34	Heterologous expression of LamA gene encoded endo-Î²-1,3-glucanase and CO2 fixation by bioengineered Synechococcus sp. PCC 7002. Frontiers of Environmental Science and Engineering, 2017, 11, 1.	3.3	2
35	Crystal structure of a marine glycoside hydrolase family 99â€‹related protein lacking catalytic machinery. Protein Science, 2017, 26, 2445-2450.	3.1	1
36	KdgF, the missing link in the microbial metabolism of uronate sugars from pectin and alginate. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 6188-6193.	3.3	80

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37	Adaptive radiation by waves of gene transfer leads to fine-scale resource partitioning in marine microbes. Nature Communications, 2016, 7, 12860.	5.8	140
38	Structural and biochemical characterization of the laminarinaseZgLamC_{GH16}fromZobellia galactanivoranssuggests preferred recognition of branched laminarin. Acta Crystallographica Section D: Biological Crystallography, 2015, 71, 173-184.	2.5	34
39	The Structure of RdDddP from Roseobacter denitrificans Reveals That DMSP Lyases in the DddP-Family Are Metalloenzymes. PLoS ONE, 2014, 9, e103128.	1.1	22
40	The Î²-Glucanase ZgLamA from Zobellia galactanivorans Evolved a Bent Active Site Adapted for Efficient Degradation of Algal Laminarin. Journal of Biological Chemistry, 2014, 289, 2027-2042.	1.6	75
41	Competitionâ€“dispersal tradeoff ecologically differentiates recently speciated marine bacterioplankton populations. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 5622-5627.	3.3	187
42	A sweet new wave: structures and mechanisms of enzymes that digest polysaccharides from marine algae. Current Opinion in Structural Biology, 2014, 28, 77-86.	2.6	112
43	Dip in the gene pool: Metagenomic survey of natural coccolithovirus communities. Virology, 2014, 466-467, 129-137.	1.1	10
44	Comparative Biochemical Characterization of Three Exolytic Oligoalginate Lyases from Vibrio splendidus Reveals Complementary Substrate Scope, Temperature, and pH Adaptations. Applied and Environmental Microbiology, 2014, 80, 4207-4214.	1.4	103
45	Substrate Recognition and Hydrolysis by a Family 50 exo-Î²-Agarase, Aga50D, from the Marine Bacterium Saccharophagus degradans. Journal of Biological Chemistry, 2013, 288, 28078-28088.	1.6	70
46	Analysis of Keystone Enzyme in Agar Hydrolysis Provides Insight into the Degradation (of a) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 382 Tc	1.6	89
47	Biochemical and Structural Characterization of the Complex Agarolytic Enzyme System from the Marine Bacterium Zobellia galactanivorans. Journal of Biological Chemistry, 2012, 287, 30571-30584.	1.6	139
48	Bacteria of the human gut microbiome catabolize red seaweed glycans with carbohydrate-active enzyme updates from extrinsic microbes. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 19786-19791.	3.3	260
49	Environmental and Gut Bacteroidetes: The Food Connection. Frontiers in Microbiology, 2011, 2, 93.	1.5	989
50	The Conformation and Function of a Multimodular Glycogen-Degrading Pneumococcal Virulence Factor. Structure, 2011, 19, 640-651.	1.6	42
51	Ab initio phasing of a nucleoside hydrolaseâ€related hypothetical protein from Saccharophagus degradans that is associated with carbohydrate metabolism. Proteins: Structure, Function and Bioinformatics, 2011, 79, 2992-2998.	1.5	3
52	Structural analysis of the degradation products of porphyran digested by Zobellia galactanivorans Î²-porphyranase A. Carbohydrate Polymers, 2011, 83, 277-283.	5.1	73
53	Analysis of a New Family of Widely Distributed Metal-independent Î±-Mannosidases Provides Unique Insight into the Processing of N-Linked Glycans. Journal of Biological Chemistry, 2011, 286, 15586-15596.	1.6	65
54	Transfer of carbohydrate-active enzymes from marine bacteria to Japanese gut microbiota. Nature, 2010, 464, 908-912.	13.7	905

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55	Portrait of an Enzyme, a Complete Structural Analysis of a Multimodular Î²-N-Acetylglucosaminidase from Clostridium perfringens. Journal of Biological Chemistry, 2009, 284, 9876-9884.	1.6	40
56	Autoproteolytic stability of a trypsin from the marine crab Cancer pagurus. Biochemical and Biophysical Research Communications, 2008, 370, 566-571.	1.0	15