

# Mirjam Czjzek

## List of Publications by Year in descending order

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Version: 2024-02-01

33  
papers

1,459  
citations

394286

19  
h-index

414303

32  
g-index

37  
all docs

37  
docs citations

37  
times ranked

1604  
citing authors

#	ARTICLE	IF	CITATIONS
1	Matching the Diversity of Sulfated Biomolecules: Creation of a Classification Database for Sulfatases Reflecting Their Substrate Specificity. <i>PLoS ONE</i> , 2016, 11, e0164846.	1.1	147
2	Habitat and taxon as driving forces of carbohydrate catabolism in marine heterotrophic bacteria: example of the model algae-associated bacterium <i>Zobellia galactanivorans</i> Dsij <sup>T</sup> . <i>Environmental Microbiology</i> , 2016, 18, 4610-4627.	1.8	131
3	Carrageenan catabolism is encoded by a complex regulon in marine heterotrophic bacteria. <i>Nature Communications</i> , 2017, 8, 1685.	5.8	131
4	A subfamily roadmap of the evolutionarily diverse glycoside hydrolase family 16 (GH16). <i>Journal of Biological Chemistry</i> , 2019, 294, 15973-15986.	1.6	118
5	A sweet new wave: structures and mechanisms of enzymes that digest polysaccharides from marine algae. <i>Current Opinion in Structural Biology</i> , 2014, 28, 77-86.	2.6	112
6	How members of the human gut microbiota overcome the sulfation problem posed by glycosaminoglycans. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 7037-7042.	3.3	99
7	A single sulfatase is required to access colonic mucin by a gut bacterium. <i>Nature</i> , 2021, 598, 332-337.	13.7	87
8	A Novel Enzyme Portfolio for Red Algal Polysaccharide Degradation in the Marine Bacterium <i>Paraglaciicola hydrolytica</i> S66T Encoded in a Sizeable Polysaccharide Utilization Locus. <i>Frontiers in Microbiology</i> , 2018, 9, 839.	1.5	73
9	Insoluble (1 $\rightarrow$ 3), (1 $\rightarrow$ 4)-D-glucan is a component of cell walls in brown algae (Phaeophyceae) and is masked by alginates in tissues. <i>Scientific Reports</i> , 2017, 7, 2880.	1.6	64
10	Continually emerging mechanistic complexity of the multi-enzyme cellulosome complex. <i>Current Opinion in Structural Biology</i> , 2017, 44, 151-160.	2.6	47
11	The Vanadium Iodoperoxidase from the Marine Flavobacteriaceae Species <i>Zobellia galactanivorans</i> Reveals Novel Molecular and Evolutionary Features of Halide Specificity in the Vanadium Haloperoxidase Enzyme Family. <i>Applied and Environmental Microbiology</i> , 2014, 80, 7561-7573.	1.4	46
12	Nanoscale Engineering of Designer Cellulosomes. <i>Advanced Materials</i> , 2016, 28, 5619-5647.	11.1	42
13	The cell-wall active mannuronan C5-epimerases in the model brown alga <i>Ectocarpus</i> : From gene context to recombinant protein. <i>Glycobiology</i> , 2016, 26, 973-983.	1.3	38
14	Structural insights into marine carbohydrate degradation by family GH16 $\beta$ -carrageenases. <i>Journal of Biological Chemistry</i> , 2017, 292, 19919-19934.	1.6	38
15	Structural and biochemical characterization of the laminarinase <i>Zg</i> LamC <sub>GH16</sub> from <i>Zobellia galactanivorans</i> suggests preferred recognition of branched laminarin. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2015, 71, 173-184.	2.5	34
16	The agar-specific hydrolase <i>Zg</i> AgaC from the marine bacterium <i>Zobellia galactanivorans</i> defines a new GH16 protein subfamily. <i>Journal of Biological Chemistry</i> , 2019, 294, 6923-6939.	1.6	32
17	Discovery and screening of novel metagenome-derived <i>GH</i> 107 enzymes targeting sulfated fucans from brown algae. <i>FEBS Journal</i> , 2018, 285, 4281-4295.	2.2	31
18	Online coupling of high-resolution chromatography with extreme UV photon activation tandem mass spectrometry: Application to the structural investigation of complex glycans by dissociative photoionization. <i>Analytica Chimica Acta</i> , 2016, 933, 1-9.	2.6	24

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19	Internal Water Dynamics Control the Transglycosylation/Hydrolysis Balance in the Agarase (AgaD) of <i>Zobellia galactanivorans</i> . ACS Catalysis, 2017, 7, 3357-3367.	5.5	23
20	Biochemical and structural investigation of two paralogous glycoside hydrolases from <i>Zobellia galactanivorans</i> : novel insights into the evolution, dimerization plasticity and catalytic mechanism of the GH117 family. Acta Crystallographica Section D: Biological Crystallography, 2015, 71, 209-223.	2.5	18
21	Double blind microarray-based polysaccharide profiling enables parallel identification of uncharacterized polysaccharides and carbohydrate-binding proteins with unknown specificities. Scientific Reports, 2018, 8, 2500.	1.6	18
22	Large conformational fluctuations of the multi-domain xylanase Z of Clostridium thermocellum. Journal of Structural Biology, 2015, 191, 68-75.	1.3	17
23	Unraveling the multivalent binding of a marine family 6 carbohydrate-binding module with its native laminarin ligand. FEBS Journal, 2016, 283, 1863-1879.	2.2	16
24	Sulfated glycan recognition by carbohydrate sulfatases of the human gut microbiota. Nature Chemical Biology, 2022, 18, 841-849.	3.9	16
25	Structure-function analysis of a new PL17 oligoalginate lyase from the marine bacterium <i>Zobellia galactanivorans</i> DsijT. Glycobiology, 2021, 31, 1364-1377.	1.3	12
26	A novel thermostable prokaryotic fucoidan active sulfatase PsFucS1 with an unusual quaternary hexameric structure. Scientific Reports, 2021, 11, 19523.	1.6	8
27	Nigritoxin is a bacterial toxin for crustaceans and insects. Nature Communications, 2017, 8, 1248.	5.8	7
28	The laterally acquired GH5 <i>Zg</i> EngAGH5_4 from the marine bacterium <i>Zobellia galactanivorans</i> is dedicated to hemicellulose hydrolysis. Biochemical Journal, 2018, 475, 3609-3628.	1.7	7
29	A wine-induced breakdown. Nature, 2017, 544, 45-46.	13.7	6
30	Structural and enzymatic characterisation of the Type III effector NopAA (=GunA) from Sinorhizobium fredii USDA257 reveals a Xyloglucan hydrolase activity. Scientific Reports, 2020, 10, 9932.	1.6	6
31	X-ray Diffraction and Density Functional Theory Provide Insight into Vanadate Binding to Homohexameric Bromoperoxidase II and the Mechanism of Bromide Oxidation. ACS Chemical Biology, 2018, 13, 1243-1259.	1.6	4
32	Mapping the deformability of natural and designed cellulosomes in solution. , 2022, 15, .		4
33	Probing the Complex Architecture of Multimodular Carbohydrate-Active Enzymes Using a Combination of Small Angle X-Ray Scattering and X-Ray Crystallography. Methods in Molecular Biology, 2017, 1588, 239-253.	0.4	3