Mirjam A Kabel

List of Publications by Citations

108 papers	3,406 citations	33 h-index	55 g-index
109 ext. papers	3,958 ext. citations	6.4 avg, IF	5.43 L-index

#	Paper	IF	Citations
108	Effect of pretreatment severity on xylan solubility and enzymatic breakdown of the remaining cellulose from wheat straw. *Bioresource Technology*, **2007**, 98, 2034-42	11	360
107	Hydrothermally treated xylan rich by-products yield different classes of xylo-oligosaccharides. *Carbohydrate Polymers*, **2002**, 50, 47-56	10.3	185
106	Structural differences of xylans affect their interaction with cellulose. *Carbohydrate Polymers*, **2007**, 69, 94-105	10.3	160
105	Discovery of the combined oxidative cleavage of plant xylan and cellulose by a new fungal polysaccharide monooxygenase. *Biotechnology for Biofuels*, **2015**, 8, 101	7.8	151
104	In vitro fermentability of differently substituted xylo-oligosaccharides. *Journal of Agricultural and Food Chemistry*, **2002**, 50, 6205-10	5.7	133
103	Preparation of arabinoxylobiose from rye xylan using family 10 Aspergillus aculeatus endo-1,4-□d-xylanase. *Carbohydrate Polymers*, **2007**, 68, 350-359	10.3	100
102	Lytic polysaccharide monooxygenases from Myceliophthora thermophila C1 differ in substrate preference and reducing agent specificity. *Biotechnology for Biofuels*, **2016**, 9, 186	7.8	99
101	Complex xylo-oligosaccharides identified from hydrothermally treated Eucalyptus wood and brewery□s spent grain. *Carbohydrate Polymers*, **2002**, 50, 191-200	10.3	94
100	Standard assays do not predict the efficiency of commercial cellulase preparations towards plant materials. *Biotechnology and Bioengineering*, **2006**, 93, 56-63	4.9	92
99	Characterization of oligomeric xylan structures from corn fiber resistant to pretreatment and simultaneous saccharification and fermentation. *Journal of Agricultural and Food Chemistry*, **2010**, 58, 11294-301	5.7	82
98	Laccase/Mediator Systems: Their Reactivity toward Phenolic Lignin Structures. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 2037-2046	8.3	81
97	Distinct Substrate Specificities and Electron-Donating Systems of Fungal Lytic Polysaccharide Monooxygenases. *Frontiers in Microbiology*, **2018**, 9, 1080	5.7	70
96	Corn fiber, cobs and stover: enzyme-aided saccharification and co-fermentation after dilute acid pretreatment. *Bioresource Technology*, **2011**, 102, 5995-6004	11	70
95	A Brief and Informationally Rich Naming System for Oligosaccharide Motifs of Heteroxylans Found in Plant Cell Walls. *Australian Journal of Chemistry*, **2009**, 62, 533	1.2	70
94	Location of O-acetyl substituents in xylo-oligosaccharides obtained from hydrothermally treated Eucalyptus wood. *Carbohydrate Research*, **2003**, 338, 69-77	2.9	64
93	Boosting LPMO-driven lignocellulose degradation by polyphenol oxidase-activated lignin building blocks. *Biotechnology for Biofuels*, **2017**, 10, 121	7.8	59
92	Hydrothermal processing of rice husks: effects of severity on product distribution. *Journal of Chemical Technology and Biotechnology*, **2008**, 83, 965-972	3.5	57

91	Fate of Carbohydrates and Lignin during Composting and Mycelium Growth of Agaricus bisporus on Wheat Straw Based Compost. *PLoS ONE*, **2015**, 10, e0138909	3.7	55
90	Effects of Eucalyptus globulus wood autohydrolysis conditions on the reaction products. *Journal of Agricultural and Food Chemistry*, **2007**, 55, 9006-13	5.7	55
89	Characterization of substituents in xylans from corn cobs and stover. *Carbohydrate Polymers*, **2011**, 86, 722-731	10.3	52
88	A comparison of liquid chromatography, capillary electrophoresis, and mass spectrometry methods to determine xyloglucan structures in black currants. *Journal of Chromatography A*, **2006**, 1133, 275-86	4.5	50
87	Importance of acid or alkali concentration on the removal of xylan and lignin for enzymatic cellulose hydrolysis. *Industrial Crops and Products*, **2015**, 64, 88-96	5.9	45
86	Quantification of the catalytic performance of C1-cellulose-specific lytic polysaccharide monooxygenases. *Applied Microbiology and Biotechnology*, **2018**, 102, 1281-1295	5.7	43
85	Quantification of Lignin and Its Structural Features in Plant Biomass Using C Lignin as Internal Standard for Pyrolysis-GC-SIM-MS. *Analytical Chemistry*, **2017**, 89, 10907-10916	7.8	42
84	Biochemical characterization and relative expression levels of multiple carbohydrate esterases of the xylanolytic rumen bacterium Prevotella ruminicola 23 grown on an ester-enriched substrate. *Applied and Environmental Microbiology*, **2011**, 77, 5671-81	4.8	42
83	Capillary electrophoresis fingerprinting, quantification and mass-identification of various 9-aminopyrene-1,4,6-trisulfonate-derivatized oligomers derived from plant polysaccharides. *Journal of Chromatography A*, **2006**, 1137, 119-26	4.5	39
82	Occurrence and function of enzymes for lignocellulose degradation in commercial Agaricus bisporus cultivation. *Applied Microbiology and Biotechnology*, **2017**, 101, 4363-4369	5.7	38
81	Enzyme resistant feruloylated xylooligomer analogues from thermochemically treated corn fiber contain large side chains, ethyl glycosides and novel sites of acetylation. *Carbohydrate Research*, **2013**, 381, 33-42	2.9	37
80	Uncovering the abilities of Agaricus bisporus to degrade plant biomass throughout its life cycle. *Environmental Microbiology*, **2015**, 17, 3098-109	5.2	37
79	Mass determination of oligosaccharides by matrix-assisted laser desorption/ionization time-of-flight mass spectrometry following HPLC, assisted by on-line desalting and automated sample handling. *Carbohydrate Polymers*, **2001**, 44, 161-165	10.3	36
78	Characterization and mode of action of two acetyl xylan esterases from Chrysosporium lucknowense C1 active towards acetylated xylans. *Enzyme and Microbial Technology*, **2011**, 49, 312-20	3.8	35
77	A generic model for glucose production from various cellulose sources by a commercial cellulase complex. *Biocatalysis and Biotransformation*, **2007**, 25, 419-429	2.5	34
76	Characterisation of cell wall polysaccharides from rapeseed (Brassica napus) meal. *Carbohydrate Polymers*, **2013**, 98, 1650-6	10.3	33
75	Residual carbohydrates from in vitro digested processed rapeseed (Brassica napus) meal. *Journal of Agricultural and Food Chemistry*, **2012**, 60, 8257-63	5.7	31
74	MALDI-TOF MS evidence for the linking of flax bast fibre galactan to rhamnogalacturonan backbone. *Carbohydrate Polymers*, **2007**, 67, 86-96	10.3	30

73	Bilberry xyloglucan--novel building blocks containing beta-xylose within a complex structure. *Carbohydrate Research*, **2007**, 342, 170-81	2.9	30
72	CE-MSn of complex pectin-derived oligomers. *Electrophoresis*, **2008**, 29, 2101-11	3.6	30
71	A novel acetyl xylan esterase enabling complete deacetylation of substituted xylans. *Biotechnology for Biofuels*, **2018**, 11, 74	7.8	29
70	Deconstruction of lignin linked p-coumarates, ferulates and xylan by NaOH enhances the enzymatic conversion of glucan. *Bioresource Technology*, **2016**, 216, 44-51	11	29
69	Influence of Lytic Polysaccharide Monooxygenase Active Site Segments on Activity and Affinity. *International Journal of Molecular Sciences*, **2019**, 20,	6.3	28
68	Carbohydrate utilization and metabolism is highly differentiated in Agaricus bisporus. *BMC Genomics*, **2013**, 14, 663	4.5	27
67	Structural features and water holding capacities of pressed potato fibre polysaccharides. *Carbohydrate Polymers*, **2013**, 93, 589-96	10.3	25
66	Carbohydrate composition of compost during composting and mycelium growth of Agaricus bisporus. *Carbohydrate Polymers*, **2014**, 101, 281-8	10.3	24
65	Processing technologies and cell wall degrading enzymes to improve nutritional value of dried distillers grain with solubles for animal feed: an in vitro digestion study. *Journal of Agricultural and Food Chemistry*, **2013**, 61, 8821-8	5.7	24
64	Effects of processing technologies and pectolytic enzymes on degradability of nonstarch polysaccharides from rapeseed meal in broilers. *Poultry Science*, **2014**, 93, 589-98	3.9	22
63	Glucans and Resistant Starch Alter the Fermentation of Recalcitrant Fibers in Growing Pigs. *PLoS ONE*, **2016**, 11, e0167624	3.7	21
62	Mechanistic insight in the selective delignification of wheat straw by three white-rot fungal species through quantitative C-IS py-GC-MS and whole cell wall HSQC NMR. *Biotechnology for Biofuels*, **2018**, 11, 262	7.8	21
61	Effects of pretreatment of wheat bran on the quality of protein-rich residue for animal feeding and on monosaccharide release for ethanol production. *Bioresource Technology*, **2012**, 124, 446-54	11	19
60	Unfermented recalcitrant polysaccharide structures from rapeseed (Brassica napus) meal in pigs. *Industrial Crops and Products*, **2014**, 58, 271-279	5.9	18
59	Elucidation of In Situ Ligninolysis Mechanisms of the Selective White-Rot Fungus Ceriporiopsis subvermispora. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 16757-16764	8.3	17
58	Compost Grown Agaricus bisporus Lacks the Ability to Degrade and Consume Highly Substituted Xylan Fragments. *PLoS ONE*, **2015**, 10, e0134169	3.7	16
57	Evidence for ligninolytic activity of the ascomycete fungus. *Biotechnology for Biofuels*, **2020**, 13, 75	7.8	16
56	Feruloyl Esterases for Biorefineries: Subfamily Classified Specificity for Natural Substrates. *Frontiers in Bioengineering and Biotechnology*, **2020**, 8, 332	5.8	15

55	Configuration of active site segments in lytic polysaccharide monooxygenases steers oxidative xyloglucan degradation. *Biotechnology for Biofuels*, **2020**, 13, 95	7.8	15
54	HO as a candidate bottleneck for MnP activity during cultivation of Agaricus bisporus in compost. *AMB Express*, **2017**, 7, 124	4.1	15
53	Uniformly 13C Labeled Lignin Internal Standards for Quantitative Pyrolysis□GC□MS Analysis of Grass and Wood. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 20070-20076	8.3	14
52	The two Rasamsonia emersonii □glucuronidases, ReGH67 and ReGH115, show a different mode-of-action towards glucuronoxylan and glucuronoxylo-oligosaccharides. *Biotechnology for Biofuels*, **2016**, 9, 105	7.8	14
51	RP-UHPLC-UV-ESI-MS/MS analysis of LPMO generated C4-oxidized gluco-oligosaccharides after non-reductive labeling with 2-aminobenzamide. *Carbohydrate Research*, **2017**, 448, 191-199	2.9	13
50	Understanding laccase/HBT-catalyzed grass delignification at the molecular level. *Green Chemistry*, **2020**, 22, 1735-1746	10	13
49	Water-holding capacity of soluble and insoluble polysaccharides in pressed potato fibre. *Industrial Crops and Products*, **2015**, 64, 242-250	5.9	12
48	The solubility of primary plant cell wall polysaccharides in LiCl-DMSO. *Carbohydrate Polymers*, **2018**, 200, 332-340	10.3	12
47	Corn stover lignin is modified differently by acetic acid compared to sulfuric acid. *Industrial Crops and Products*, **2018**, 121, 160-168	5.9	12
46	Separation of digesta fractions complicates estimation of ileal digestibility using marker methods with Cr2O3 and cobalt-ethylenediamine tetraacetic acid in broiler chickens. *Poultry Science*, **2014**, 93, 2010-7	3.9	11
45	The impact of lignin sulfonation on its reactivity with laccase and laccase/HBT. *Catalysis Science and Technology*, **2019**, 9, 1535-1542	5.5	10
44	Characterisation of branched gluco-oligosaccharides to study the mode-of-action of a glucoamylase from Hypocrea jecorina. *Carbohydrate Polymers*, **2015**, 132, 59-66	10.3	10
43	Mass spectrometric fragmentation patterns discriminate C1- and C4-oxidised cello-oligosaccharides from their non-oxidised and reduced forms. *Carbohydrate Polymers*, **2020**, 234, 115917	10.3	10
42	Improving ruminal digestibility of various wheat straw types by white-rot fungi. *Journal of the Science of Food and Agriculture*, **2019**, 99, 957-965	4.3	10
41	Functional Validation of Two Fungal Subfamilies in Carbohydrate Esterase Family 1 by Biochemical Characterization of Esterases From Uncharacterized Branches. *Frontiers in Bioengineering and Biotechnology*, **2020**, 8, 694	5.8	10
40	Biochemical characterization of the xylan hydrolysis profile of the extracellular endo-xylanase from Geobacillus thermodenitrificans T12. *BMC Biotechnology*, **2017**, 17, 44	3.5	9
39	Endoglucanase V and a phosphatase from Trichoderma viride are able to act on modified exopolysaccharide from Lactococcus lactis subsp. cremoris B40. *Carbohydrate Research*, **1999**, 317, 131-44	2.9	9
38	Lignin composition is more important than content for maize stem cell wall degradation. *Journal of the Science of Food and Agriculture*, **2018**, 98, 384-390	4.3	8

37	Structural Motifs of Wheat Straw Lignin Differ in Susceptibility to Degradation by the White-Rot Fungus. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 20032-20042	8.3	8
36	Controlling the Competition: Boosting Laccase/HBT-Catalyzed Cleavage of a □O-4? Linked Lignin Model. *ACS Catalysis*, **2020**, 10, 8650-8659	13.1	8
35	Termite Gut Microbiota Contribution to Wheat Straw Delignification in Anaerobic Bioreactors. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 2191-2202	8.3	8
34	The physiology of Agaricus bisporus in semi-commercial compost cultivation appears to be highly conserved among unrelated isolates. *Fungal Genetics and Biology*, **2018**, 112, 12-20	3.9	7
33	Improved starch recovery from potatoes by enzymes and reduced water holding of the residual fibres. *Carbohydrate Polymers*, **2014**, 113, 256-63	10.3	7
32	Colonies of the fungus Aspergillus niger are highly differentiated to adapt to local carbon source variation. *Environmental Microbiology*, **2020**, 22, 1154-1166	5.2	7
31	Potential of a gypsum-free composting process of wheat straw for mushroom production. *PLoS ONE*, **2017**, 12, e0185901	3.7	6
30	Understanding carbohydrate structures fermented or resistant to fermentation in broilers fed rapeseed (Brassica napus) meal to evaluate the effect of acid treatment and enzyme addition. *Poultry Science*, **2014**, 93, 926-34	3.9	6
29	Evaluation of fungal degradation of wheat straw cell wall using different analytical methods from ruminant nutrition perspective. *Journal of the Science of Food and Agriculture*, **2019**, 99, 4054-4062	4.3	5
28	Accumulation of recalcitrant xylan in mushroom-compost is due to a lack of xylan substituent removing enzyme activities of Agaricus bisporus. *Carbohydrate Polymers*, **2015**, 132, 359-68	10.3	5
27	Delignification outperforms alkaline extraction for xylan fingerprinting of oil palm empty fruit bunch. *Carbohydrate Polymers*, **2016**, 153, 356-363	10.3	5
26	Reactivity of p-Coumaroyl Groups in Lignin upon Laccase and Laccase/HBT Treatments. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 8723-8731	8.3	4
25	Structural characterization of tissue-specific galactan from flax fibers by 1H NMR and MALDI TOF mass spectrometry. *Russian Journal of Bioorganic Chemistry*, **2006**, 32, 558-567	1	4
24	Oxidized Product Profiles of AA9 Lytic Polysaccharide Monooxygenases Depend on the Type of Cellulose. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 14124-14133	8.3	4
23	Low liquid ammonia treatment of wheat straw increased enzymatic cell wall polysaccharide degradability and decreased residual hydroxycinnamic acids. *Bioresource Technology*, **2019**, 272, 288-299	11	4
22	Breeding Targets to Improve Biomass Quality in Miscanthus. *Molecules*, **2021**, 26,	4.8	4
21	Different action patterns of glucoamylases on branched gluco-oligosaccharides from amylopectin. *Carbohydrate Polymers*, **2016**, 143, 198-203	10.3	3
20	Production of □1,3-L-arabinofuranosidase active on substituted xylan does not improve compost degradation by Agaricus bisporus. *PLoS ONE*, **2018**, 13, e0201090	3.7	3

19	Identification of Structural Features of Various (O-Acetylated) Xylo-Oligosaccharides from Xylan-Rich Agricultural By-Products: A Review. *ACS Symposium Series*, **2003**, 107-121	0.4	3
18	Fungal xylanolytic enzymes: Diversity and applications. *Bioresource Technology*, **2022**, 344, 126290	11	3
17	Regioselective C4 and C6 Double Oxidation of Cellulose by Lytic Polysaccharide Monooxygenases. *ChemSusChem*, **2021**,	8.3	3
16	Quantification of morphochemical changes during in situ enzymatic hydrolysis of individual biomass particles based on autofluorescence imaging. *Biopolymers*, **2020**, 111, e23347	2.2	3
15	Facile enzymatic C□acylation of lignin model compounds. *Catalysis Communications*, **2020**, 136, 105919	3.2	3
14	The nutritional value of the lower maize stem cannot be improved by ensiling nor by a fungal treatment. *Animal Feed Science and Technology*, **2019**, 247, 92-102	3	3
13	Non-productive binding of cellobiohydrolase i investigated by surface plasmon resonance spectroscopy. *Cellulose*, **2021**, 28, 9525-9545	5.5	3
12	Biomass Pretreatment and Enzymatic Hydrolysis Dynamics Analysis Based on Particle Size Imaging. *Microscopy and Microanalysis*, **2018**, 24, 517-525	0.5	2
11	Strategy to identify reduced arabinoxylo-oligosaccharides by HILIC-MS.. *Carbohydrate Polymers*, **2022**, 289, 119415	10.3	2
10	Microbial lignin degradation in an industrial composting environment. *Bioresource Technology Reports*, **2022**, 17, 100911	4.1	1
9	Glycoside Hydrolase family 30 harbors fungal subfamilies with distinct polysaccharide specificities.. *New Biotechnology*, **2021**, 67, 32-41	6.4	1
8	Modification of Plant Carbohydrates Using Fungal Enzymes **2021**, 370-384		1
7	GH10 and GH11 endoxylanases in Penicillium subrubescens: Comparative characterization and synergy with GH51, GH54, GH62 □L-arabinofuranosidases from the same fungus. *New Biotechnology*, **2022**, 70, 84-92	6.4	1
6	Fungal glycoside hydrolase family 44 xyloglucanases are restricted to the phylum Basidiomycota and show a distinct xyloglucan cleavage pattern.. *IScience*, **2022**, 25, 103666	6.1	0
5	Profiling the cell walls of seagrasses from A (Amphibolis) to Z (Zostera).. *BMC Plant Biology*, **2022**, 22, 63	5.3	0
4	Steering the formation of cellobiose and oligosaccharides during enzymatic hydrolysis of asparagus fibre. *LWT - Food Science and Technology*, **2022**, 160, 113273	5.4	0
3	Extending the diversity of Myceliophthora thermophila LPMOs: Two different xyloglucan cleavage profiles.. *Carbohydrate Polymers*, **2022**, 288, 119373	10.3	0
2	Cereal type and combined xylanase/glucanase supplementation influence the cecal microbiota composition in broilers.. *Journal of Animal Science and Biotechnology*, **2022**, 13, 51	6	0

1	In vivo formation of arabinoxylo-oligosaccharides by dietary endo-xylanase alters arabinoxylan utilization in broilers. *Carbohydrate Polymers*, **2022**, 291, 119527	10.3	0