Publication List Li Liu

as of October 2025

95. Zhuang J.D., Shi J.M., Lu A.M., Liu L.† and Voglmeir J.† (2025): ATP-independent enzymatic cascade for chitin-to-glucose bioconversion. ***Green Chemistry*** (accepted)

94. Bian J., Wang Y., Liu L.†, Voglmeir J.† (2025): Human O-GlcNAc Transferase Substrate Recognition via MALDI-TOF MS Quantification of Peptide Glycosylation. ***Carbohydrate Research*** (accepted)

93. Hu Z.X., Zhang J.Y., van Ede J.,Zhang Y.Y., Li Y.Q., Ghirardello M., M. Galan M.C., Pabst M., Liu L.†, Voglmeir J.† (2025): Human O-GlcNAc Transferase Substrate Recognition via MALDI-TOF MS Quantification of Peptide Glycosylation. ***Glycoconjugate Journal*** (accepted)

92. Wei B., Liu L.†, Voglmeir J.† (2025): Novel PNGase H+ from Amycolatopsis mediterranei: Biochemical properties and food analysis potential. ***Food Materials Research*** 5: e015

91. Zhang Y.Y., Hu Z.X., Zhang S.Y., Liu Li., Galan M.C.†, Voglmeir J.†, Ghirardello M. † (2025): Improved ESI-MS Sensitivity via an Imidazolium Tag (DAPMI-ITag) for Precise Sialic Acid Detection in Human Serum and CMAH-Null Mouse Tissues. ***Analytical Chemistry*** 97, 24, 12587-12694.

90. Wang W., Pang X.J., Wang M., Tian Y., Wu W., Pergolizzi G., Rejzek M., Field R.A., Liu L.†, Widmalm G.†, and Voglmeir J.† (2025): Repurposing CDP-Tyvelose 2-Epimerase Enables a GDP-Fucose-based Fucosylation Pathway starting from Sucrose. ***JACS Au*** 5,6, 2689-2698.

89. Guo R.R., Heijs B., Wang W.J., Wuhrer M., Liu L.†, Lageveen-Kammeijer G.S.M.†, and Voglmeir J.† (2025): Insight into Distribution and Composition of Nonhuman N-Glycans in Mammalian Organs via MALDI-TOF and MALDI-MSI. ***Carbohydrate Polymers*** 351, 123065.

88. Hu Z.X., Lyu Y.S., Song H.B., Liu L.† and Voglmeir J.† (2024): Galactosylation of Glycoconjugates Using Pacific oyster β-1,3-Galactosyltransferases. ***Carbohydrate Research*** 109254.

87. Hu Z.X., Li S.R., Xia Q.J., Wang T., Voglmeir J., Widmalm G.† and Liu L.† (2024): Enzymatic Synthesis of N-Formylated Sialosides via a Five-Enzyme Cascade. ***Organic & Biomolecular Chemistry*** 22, 7485-7491.

86. Zhang J.X., Lyu Y.S., Voglmeir J.† & Liu L.† (2024): Differential impact of glycoprotein glycosylation on *Akkermansia muciniphila* growth dynamics. ***Food Materials Research*** 4: e022.

85. Chen S., Daly P., Anjago W.M., Wang R., Zhao Y., Wen X., Zhou D., Deng S., Lin X., Voglmeir J., Cai F., Shen Q., Druzhinina I.S., Wei L. (2024): Genus-wide analysis of Trichoderma antagonism toward Pythium and Globisporangium plant pathogens and the contribution of cellulases to the antagonism. ***Applied and Environmental Microbiology*** e0068124.

*Corresponding Author
†Co-corresponding Author

84. Zhang Y.Y., Zhang S.Y., Hu Z.X., Voglmeir J., Liu L.†, Galan M.C.†, Ghirardello M.† (2024): High sensitivity profiling of N-glycans from mouse serum using fluorescent imidazolium tags by HILIC electrospray ionisation spectrometry. ***Carbohydrate Polymers*** 343:122449.

83. Zhuang J.D., Shi J.M., Hong C.C., Wu T.T., Liu L.†, and Voglmeir J.† (2024): Engineering Bifunctional Galactokinase/Uridyltransferase Chimera for Enhanced UDP-D-Xylose Production. ***JACS Au*** 4(7):2557-2563.

82. Liu F.F., Wang M., Ma G.H., Kulinich A., Liu L.†, Voglmeir J.† (2024): Characterization of *Solitalea canadensis* α-mannosidase with specific activity towards α1,3-mannosidic linkages. ***Carbohydrate Research*** 538:109100.

81. Yu Y.Y., Zhang S.Y., Sun J.H., Li Y.Y., Zhang Y.Y., Lu A.M., Liu L.†, Voglmeir J.† (2024): Biocatalytic β-glucosylation/ β-galactosylation of Rebaudioside C by glycosynthases. ***Food Materials Research*** (in press).

80. Song H., Wang B., Zhao G., Lu S., Zhang D., Kong J., Li J., Zhang X., Lyu Y., Liu L.† (2024): Discovery and biochemical characterization of two hexokinases from Crassostrea gigas. ***Protein Expression and Purification*** 215, 106408.

79. Zhang X., Yu X., Voglmeir J., Wei M., Liu J., Shang Y., Jin W., Wang D, Lyu Y. (2023) Improving the thermostability of Cyclobacterium marinum chitin deacetylase by disulfide bond engineering. ***Process Biochemistry*** 133:142-50.

78. Cheng G., Lyu Y., Ran R., Liu L.†, Voglmeir J.† (2023) Expression and in vitro glycosylation of recombinant edible bird nest (EBN) mucin. ***Food Materials Research*** 4:e002.

77. Liu Y, Hu X., Voglmeir J.†, Liu L.† (2023): N-glycan profiles as a tool in qualitative and quantitative analysis of goat milk adulteration. ***Food Chemistry*** 136116.

76. Guo R.R., Lageveen-Kammeijer G.S.M., Wang W., Dalebout H., Zhang W., Wuhrer M., Liu L.†, Heijs B.†, Voglmeir J.† (2023). Analysis of Immunogenic Galactose-α-1,3-galactose-Containing N-Glycans in Beef, Mutton, and Pork Tenderloin by Combining Matrix-Assisted Laser Desorption/Ionization-Mass Spectroscopy and Capillary Electrophoresis Hyphenated with Mass Spectrometry via Electrospray Ionization. ***Journal of Agricultural & Food Chemistry*** 71 (9):4184-4192.

75. Crouch L.I.†, Urbanowicz P.A., Baslé A., Cai Z.P., Liu L., Voglmeir J., Melo Diaz J.M., Benedict S.T., Spencer D.I.R., Bolam D.N.† (2022): Plant N-glycan breakdown by human gut Bacteroides. ***Proceedings of the National Academy of Sciences of the USA*** 119 (39):e2208168119.

74. Chen L.S., Laborda P., Cai Z., Hagan A.K., Lu A., Voglmeir J., Liu L.* (2022): Novel chemical- and protein-mediated methods for glucosamine detection. ***Food Materials Research*** (2), 19.

73. Guo R.R., Zhang T.C., Lambert T.O.T., Wang T., Voglmeir J.†, Rand K.D.†, Liu L.† (2022): PNGase H+ variant from Rudaea cellulosilytica with improved deglycosylation efficiency for rapid analysis of eukaryotic N-glycans and HDX-MS

analysis of glycoproteins. ***Rapid Communications in Mass Spectrometry*** 36 (21):e9376.

72. Zhang J., Xia Y., Wang D., Du Y., Chen Y., Zhang C., Mao J., Wang M., She Y.M., Peng X., Liu L., Voglmeir J., He Z., Liu L., Li J. (2022): A Predominant Role of AtEDEM1 in Catalyzing a Rate-Limiting Demannosylation Step of an Arabidopsis Endoplasmic Reticulum-Associated Degradation Process. ***Frontiers in Plant Science*** 13:952246.

71. Hu Z.X, Cheng C., Li Y.Q., Qi X.H., Wang T., Liu L.†, Voglmeir J.† (2022): Recombinant snail sialic acid aldolase is promiscuous towards aliphatic aldehydes. ***ChemBioChem*** 23(13):e202200074.

70. Cheng C., Hu Z.X., He M., Liu L.†, Voglmeir J.† (2022): Recombinant human N-acetylneuraminate lyase as a tool to study clinically relevant mutant variants. ***Carbohydrate Research*** 516: 108561.

69. Jin-Min Shi J.M., Wu T.T., Zhou H., Zhang Y.Y., Liu L., Widmalm G.†, Voglmeir J.† (2022): Substrate promiscuities of a bacterial galactokinase and a glucose-1-phosphate uridyltransferase enable xylose salvaging. ***Green Chemistry*** (24), 3717-3722.

68. Cao R., Li J.X., Chen H., Cao C., Zheng F., Huang K., Chen Y.R., Flitsch S.L., Liu L.†, Voglmeir J.† (2022): Complete shift in glycosyl donor specificity in mammalian, but not *C. elegans* β1,4-GalT1 Y286L mutants, enables the synthesis of N,N-diacetyllactosamine. ***ChemCatChem*** 14, (7) e202101699.

67. Wang T., Liu L.†, Voglmeir J.† (2022): mAbs N-glycosylation: Implications for biotechnology and analytics. ***Carbohydrate Research*** (514), 108541.

66. Mao H., Li S., Yin B., Lin X., Guo J., Wang T., Voglmeir J.†, Liu L.† (2022). The mechanism of probiotic action of human milk N-glycome towards *B. infantis* ATCC 15697 and identification of the principal functional components. ***Food Chemistry*** 384, 132532.

65. Yin B., Lin X. Wang T., Liu L.* (2022): Detailed characterization of antipathogenic properties of human milk N-glycome, against Staphylococcus aureus, indicating its targeting on cell surface proteins. ***ACS Infectious Diseases*** 8 (3) 635–644.

64. Lin X., Yao H., Guo J., Huang Y., Wang W., Yin B., Li X., Wang T., Li C., Xu X., Zhou G., Voglmeir J.†, Liu L.† (2022): Protein Glycosylation and Gut Microbiota Utilization Can Limit the In Vitro and In Vivo Metabolic Cellular Incorporation of Neu5Gc. ***Molecular Nutrition and Food Research*** 66 (5), 2100615.

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†Co-corresponding Author

63. Senan A.M.†, Yin B., Zhang Y., Nasiru M.M., Lyu Y.M., Umair M., Bhat J.A., Zhang S., and Liu L.† (2021): Efficient and selective catalytic hydroxylation of unsaturated plant oils: a novel method for producing anti-pathogens. ***BMC Chemistry*** 15: 20.

62. Lyu Y., Zheng F., Qiu C., Wang M., Wang D., Zhang X., Voglmeir J., Liu L., Yu X. (2021): Heterologous Expression of a Thermostable Chitinase from Myxococcus xanthus and Its Application for High Yield Production of Glucosamine from Shrimp Shell. ***Foods*** 10(11):2808.

61. Wang T., Jia X., Liu L.†, Voglmeir J.† (2021): Changes in protein N-glycosylation during the fruit development and ripening in melting-type peach. ***Food Materials Research*** 1: 2.

60. Zhang Y.Y., Ghirardello M., Wang T., Lu A.M., Liu L., Voglmeir J., Galan M.C. (2021): Imidazolium labelling permits the sensitive mass-spectrometric detection of N-glycosides directly from serum. ***Chemical Communications*** 57: 7003-7006. (link)

59. Han Y.Y., Yue H.Y., Zhang X.Y., Lyu Y.M., Liu L.†, and Voglmeir J.† (2021) Construction and Evaluation of Peptide-Linked Lactobacillus brevis β-Galactosidase Heterodimers. ***Protein Peptide Letters*** 28(2): 221-228.

58. Cao R., Zhang T.C., Chen Y.R., Cao C., Chen H., Huang Y.F., Fujita M., Liu L.†, Voglmeir J.† (2020): Aberration of Serum and Tissue N-Glycans in Mouse β1,4-GalT1 Y286L Mutant Variants. ***Glycoconjugate Journal*** 37(6): 767-775.

57. Yue H., Han Y.Y., Yin B., Cheng C., and Liu L.* (2020): Comparison of anti-pathogenic effect towards Staphylococcus aureus of N-linked and free oligosaccharides derived from human, bovine and goat milk. ***Journal of Food Science*** 85(8): 2329-2339.

56. Wang M.M., Zhang Y.Y., Yao H.L., Liu L.†, and Voglmeir J.† (2020): Chemoenzymatic Synthesis of a N-Propionyl-Neuraminic Acid Derivative and its Application in the Determination of the Sialic Acid Content in Poultry Eggs. ***Science and Technology of Food Industry*** TS253.7.

55. Guo R.R., Comamala G., Yang. H.H., Gramlich M., Du Y.M., Wang T., Zeck A., Rand K.D., Liu L.†, and Voglmeir J.† (2020): Discovery of highly active recombinant PNGase H+ variants through the rational exploration of unstudied acidobacterial genomes. ***Frontiers in Bioengineering and Biotechnology*** 8:741. (link)

54. Laborda P., Lyu Y.M., Parmeggiani F., Lu A.M., Wang W.J., Huang Y.Y., Huang K., Guo J., Liu L.†, Flitsch S.†, and Voglmeir J.† (2020): Enzymatic N-Acylation Step Enables

the Biocatalytic Synthesis of Unnatural Sialosides. ***Angewandte Chemie International Edition*** 59, 5308 –5312.

53. Kulinich A., Wang Q., Duan X.C., Lyu Y.M., Zhang X.Y., Awad F.N., Liu L.†, and Voglmeir J.† (2020): Biochemical characterization of the endo-α-N-acetyl-galactosaminidase pool of the human gut symbiont Tyzzerella nexilis. ***Carbohydrate Research*** 490:107962.

52. Zhu L., Lu X., Liu L., Voglmeir J., Zhong X., and Yu Q. (2020): Akkermansia muciniphila protects intestinal mucosa from damage caused by S. pullorum by initiating proliferation of intestinal epithelium. ***BMC Veterinary Research*** 51(1):34.

51. Wang T., Liu L., and Voglmeir J.* (2020): Chemoenzymatic synthesis of ultralow and low-molecular weight heparins. ***Biochimica et Biophysica Acta (BBA) - Proteins and Proteomics*** 1868(2): 1400301.

50. Zheng F., Du Y., Lin X., Zhou L., Bai Y., Yu X., Voglmeir J., and Liu L.† (2019): N-Glycosylation Plays An Essential and Species-Specific Role in Anti-Infection Function of Milk Proteins Using Listeria monocytogenes as the Model Pathogen. ***Journal of Agricultural & Food Chemistry*** 67(38): 10774-10781.

49. Shi Z., Yin B., Li Y., Zhou G., Li C., Xu X.L, Luo X., Zhang X., Qi J., Voglmeir J., and Liu L.† (2019): N-glycan profile as a tool in qualitative and quantitative analysis of meat adulteration. ***Journal of Agricultural & Food Chemistry*** 67(37): 10543-10551.

48. Zhang Y.Y., Senan A.M., Wang T.†, Liu L.†, and Voglmeir J. (2019): 1-(2-Aminoethyl)-3-methyl-1H-imidazol-3-ium tetrafluoroborate: synthesis and application in carbohydrate analysis. ***Pure and Applied Chemistry*** 91 (9), 1441-1450.

47. Guo J., Cao C. Li, Y.Q., Liu L.†, and Voglmeir J. (2019): Heterologous Expression and Activity Study of a Novel Sialic Acid Aldolase Gene Derived from Pedobacter heparinus. ***Science and Technology of Food Industry*** DOI: 10.13386/j.issn1002-0306.2019.05.023.

46. Cai Z.P., Conway L.P., Huang Y.Y., Wang W.J., Laborda P., Wang T., Lu A.M., Yao H.L., Huang K., Flitsch S.L., Liu L.† and Voglmeir J. (2019): Enzymatic Synthesis of Trideuterated Sialosides. ***Molecules*** 24(7): 1368.

45. Lyu Y.M., Li Y.Q., Song H.B., Guo J., Wang T., Liu L., Yedid G., and Voglmeir J. (2019): A Converging Strategy for the Generation of a Virtually Sequenced cDNA

Library from Unreferenced Pacific Oysters. ***Journal of Visualized Experiments*** (148): e59462.

44. Mu C., Cai Z., Bian G., Du Y., Ma S., Su Y., Liu L., Voglmeir J., Huang R and Zhu W. (2019): New Insights into Porcine Milk N-Glycome and the Potential Relation with Offspring Gut Microbiome. ***Journal of Proteome Research*** 18(3): 1114-1124.

43. Wang M., Zheng F., Wang T., Lyu Y.M., Alteen M.G., Cai Z.P., Cui Z.L., Liu L.†, and Voglmeir J.† (2019): Characterization of Stackebrandtia nassauensis GH 20 Beta-Hexosaminidase, a Versatile Biocatalyst for Chitobiose Degradation. ***International Journal of Molecular Sciences*** 20(5): 1243.

42. Wang T., Zheng S.L., Liu L.† and Voglmeir J. (2019): Development of a colorimetric PNGase activity assay. ***Carbohydrate Research*** 472: 58–64.

41. Guo B.S., Zheng F., Crouch L., Cai Z.P., Wang M., Bolam D.N., Liu L.†, and Voglmeir J. (2018): Cloning, purification and biochemical characterisation of a GH35 beta-1,3/beta-1,6-galactosidase from the mucin-degrading gut bacterium Akkermansia muciniphila. ***Glycoconjugate Journal*** 35(3): 255-263.

40. Du Y.M., Zheng S.L., Liu L., Voglmeir J., and Yedid G. (2018): Analysis of N-glycans from Raphanus sativus Cultivars Using PNGase H+. ***Journal of Visualized Experiments*** (136): e57979.

39. Song H.B., He M., Cai Z.P., Huang K., Flitsch S.L., Liu L.† and Voglmeir J.† (2018): UDP-glucose 4-epimerase and β-1,4-galactosyltransferase from the oyster *Magallana gigas* as valuable biocatalysts for the production of galactosylated products. ***International Journal of Molecular Sciences*** 19(6): 1600.

38. Huang K., Parmeggiani F., Pallister E., Huang C.J., Liu F.F., Li Q., Birmingham W.R., Both P., Thomas B., Liu L., Voglmeir J., Flitsch S. (2018): Characterisation of a bacterial galactokinase with high activity and broad substrate tolerance for chemoenzymatic synthesis of 6 - aminogalactose - 1 - phosphate and analogues. ***Chembiochem: A European Journal of Chemical Biology*** DOI: 10.1002/cbic.201700477 (link)

37. Wang M., Zhang X.Y., Guo R.R., Cai Z.P., Hu X.C., Chen H., Wei S., Voglmeir J.†, Liu L.† (2018): Cloning, purification and biochemical characterization of two β-N-acetylhexosaminidases from the mucin-degrading gut bacterium Akkermansia muciniphila. ***Carbohydrate Research*** 457: 1-8.

36. Awad F.N., Laborda P., Wang M., Lu A.M., Li Q., Cai Z.P., Liu L.†, Voglmeir J.† (2017): Discovery and biochemical characterization of a mannose Phosphorylase catalyzing

the synthesis of novel β-1,3-Mannosides. ***Biochimica et Biophysica Acta*** 1861 (12): 3231-3237.

35. Chen H., Cao C., Kulinich A., Liu L.[†], Jung Y.S.[†], Voglmeir J.[†] (2017): Engineering of an episomal plasmid suitable for high-throughput expression in Pichia pastoris. ***Combinatorial Chemistry & High Throughput Screening*** 20 (8): 726-733.

34. Laborda P., Wang S.Y., Lu A.M., He M., Duan X.C., Qian J.Y., Jung S.Y., Liu L.†, Voglmeir J.† (2017): Diastereoselective One-step Synthesis of 2-Keto-3-deoxy-D-glycero-D-galacto-nononic acid (KDN) Analogues as Templates for the Development of Influenza Drugs. ***Advanced Synthesis & Catalysis*** 359 (18): 3120–3125.

33. Wei S., Zhang X.Y., Sun Y., Conway L.P., Liu L.[*] (2017): Discovery and Biochemical Characterization of UDP-Glucose Dehydrogenase from Akkermansia muciniphila. ***Protein & Peptide Letters*** 24 (9): 729-734.

32. Wang S.Y., Laborda P., Lu A.M, Wang M., Duan X.C, Liu L.†, Voglmeir J.† (2017). Chemo-enzymatic approach to access diastereopure α-substituted GlcNAc derivatives. ***Journal of Carbohydrate Chemistry*** 35: 423-434.

31. Wang T., Hu X.C., Cai Z.P., Voglmeir J.†, Liu L.† (2017): Qualitative and Quantitative Analysis of Carbohydrate Modification on Glycoproteins from Seeds of Ginkgo biloba. ***Journal of Agricultural and Food Chemistry*** 65 (35), 7669-7679.

30. Wang M., Wei S., Wang T., , Voglmeir J., Liu L.* (2017). Gene cloning, expression, purification and characterization of a beta-N-acetylhexosaminidase from Solitalea Canadensis. ***Acta Microbiologica Sinica*** 57 (8):1270-1282.

29. Min Y.Q., Duan X.C., Zhou Y.D., Kulinich A., Wang M., Cai Z.P., Ma H.Y., Liu L., Zhang X.L.†, Voglmeir J.† (2017): Effects of Microvirin Mono- and Oligomers on Hepatitis C Virus. ***Bioscience Reports*** 37 (3) BSR20170015.

28. Lv Y.M., Laborda P., Huang K., Cai Z.P., Wang M., Lu A.M., Doherthy C., Liu L.†, Flitsch S.†, Voglmeir J.† (2017): Highly efficient and selective biocatalytic production of glucosamine from chitin. ***RSC Green Chemistry*** 19, 527-535.

27. Wang W.L., Wang W., Du Y.M., Wu H., Yu X.B., Ye K.P., Li C.B., Jung Y.S., Voglmeir J.†, Liu Li.† (2017): Comparison of Anti-Pathogenic Activities of the Human and Bovine Milk N-Glycome: Fucosylation is a Key Factor. ***Food Chemistry*** 235:167-174.

26. Wang W.L., Du Y.M., Wang W., Conway L.P., Cai Z.P., Voglmeir J.† and Liu L.† (2017): Comparison of the Bifidogenic Activity of Human and Bovine Milk N-glycome. ***Journal of Functional Foods*** 33, 40-51.

25. Cao C., Wang W.J., Huang Y.Y., Yao H.L., Conway L.P., Liu L.†, Voglmeir J.† (2017): Determination of Sialic Acids in Liver and Milk Samples of Wild-type and Cmah Knock-out Mice. ***Journal of Visualized Experiments*** (125), e56030.

24. Cai Z.P., Wang W.L., Conway L.P., Huang K., Awad F.N., Liu L.† and Voglmeir J.† (2017): 1,3-Di(2-dipyridyl)propan-1,3-dione – a new fluorogenic labeling reagent for milk oligosaccharides. ***Pure and Applied Chemistry*** 89(7), 921-929.

23. Wang S.Y., Laborda P., Lu A.M., Duan X.C., Ma H.Y., Liu L.†, Voglmeir J.† (2016): N-acetylglucosamine 2-Epimerase from *Pedobacter heparinus*: First Experimental Evidence of a Deprotonation/Reprotonation Mechanism. ***Catalysts*** 6, 212.

22. Awad F.N., Kulinich A., Yao M.Y., Duan C.X., Cai Z.P., Gu B., Liu L.† and Voglmeir J.† (2016): Enzymatic Glycosylation of Indoxyglycosides Catalyzed by a Novel Maltose Phosphorylase from Emticicia oligotrophica. ***Journal of Carbohydrate Chemistry*** 35 (6): 301-314.

21. Gu B., Laborda P., Wei S., Song H.B., Duan X.C., Liu L.†, Voglmeir J.† (2016): Discovery and Biochemical Characterization of the UDP-Xylose Biosynthesis Pathway in Sphaerobacter thermophilus. ***Protein & Peptide Letters*** 23 (12) :1103-1110.

20. Wang M.M., Laborda P., Conway L.P., Duan X.C., Huang K., Liu L.†, Voglmeir J.† (2016): An integrated 3D-printed platform for the automated isolation of N-glycans. ***Carbohydrate Research*** 433, 14-17.

19. Kulinich A., Liu L.* (2016): Human milk oligosaccharides: The role in the fine-tuning of innate immune responses. ***Carbohydrate Research*** 432: 62-70.

18. Yao H.L., Conway L.P., Wang M.M., Huang K., Liu L.†, Voglmeir J.† (2016): Quantification of sialic acids in red meat by UPLC-FLD using indoxylsialosides as internal standards. ***Glycoconjugate Journal*** 33 (2): 219-226.

17. Liu S., Kulinich A., Cai Z.P., Ma H.Y., Du Y.M., Lv Y.M., Liu L.†, Voglmeir J.† (2016): The Fucosidase-Pool of Emticicia oligotrophica: Biochemical Characterisation and Transfucosylation Potential. ***Glycobiology*** 26 (8): 871-879.

16. Liu F.F., Kulinich A., Du Y.M., Liu L.†, Voglmeir J.† (2016): Sequential processing of mannose-containing glycans by two α-mannosidases from Solitalea canadensis. ***Glycoconjugate Journal*** 33 (2) 159-168.

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15. Du M.Y., Xia T., Gu X.Q., Wang T., Ma H.Y., Voglmeir J.[†], Liu L. (2015): A rapid sample preparation methodology for plant N-glycan analysis using acid stable PNGase H[+]. ***Journal of Agricultural and Food Chemistry*** 63(48):10550-5.

14. Kulinich A., Liu S., Ma H.Y., Lv Y.M., Liu L., Voglmeir J.[†] (2015): Identification and Characterization of Two Novel Alpha-D-Galactosidases from Pedobacter heparinus. ***Protein & Peptide Letters 22,*** 1052-1059.

13. Huang K., Wang M.M., Kulinich A., Yao H.L., Ma H.Y., Martínezc J.E.R., Duan X.C., Chen H., Cai Z.P., Flitsch S.L., Liu L., Voglmeir J.[†](2015): Biochemical characterisation of the neuraminidase pool of the human gut symbiont *Akkermansia muciniphila*. ***Carbohydrate Research*** 415:60-5.

12. Duan X.C., Chen H., Liu F.F., Conway L.P., Wei S., Cai Z.P., Liu L., Voglmeir J.[†] (2015): One Assay for All: Exploring Small Molecule Phosphorylation using Amylose-Polyiodide Complexes. ***Analytical Chemistry*** 87 (19): 9546-9550.

11. Wen S., Zhou G., Song S., Xu X., Voglmeir J., Liu L., Zhao .F, Li M., Li L., Yu X., Bai Y., Li C. (2015): Discrimination of in vitro and in vivo digestion products of meat proteins from pork, beef, chicken and fish. ***Proteomics*** 15 (21): 3688-98.

10. Duan X.C., Lu A.M., Gu B., Cai Z.P., Ma H.Y., Wei S., Laborda P., Liu L., Voglmeir J.[†] (2015): Functional characterization of the UDP-xylose biosynthesis pathway in Rhodothermus marinus. ***Applied Microbiology and Biotechnology*** 99(22):9463-72.

9. Wei S., Kulinich A., Duan X.C., Liu L. and Voglmeir J.[†] (2015): Discovery and Biochemical Characterization of UDP-Glucose Dehydrogenase from Granulibacter bethesdensis ***Protein & Peptide Letters*** 22***,*** 628-634.

8. Wang T., Cai Z.P., Ma H.Y., Du Y.M., Gu X.Q., Huang K., Voglmeir J.[†] and Liu L. (2014): Discovery and characterization of a novel extremely acidic bacterial *N*-glycanase with combined advantages of PNGase F and A. ***Bioscience Reports*** 34 (6): e00149.

7. Cai Z.P., Hagan A.K., Wang M.M., Flitsch S.L., Liu L., Voglmeir J.[†] (2014): 2-Pyridylfuran: A New Fluorescent Tag for the Analysis of Carbohydrates. ***Analytical Chemistry*** 86, 5179-86.

6. Hagan A.K., Wang M.M., Liu L.[*] (2014) Current Approaches to Glycoprotein Analysis. ***Protein & Peptide Letters*** 21***,*** 986-99.

5. Liu L., Tharmalingam T., Maischberger E., Albrecht S., Gallagher M.E., Miranda-Casoluengo R., Meijer W.G., Rudd P.M., Irwin J.A. (2013): A HPLC-based glycoanalytical protocol allows the use of natural O-glycans derived from

glycoproteins as substrates for glycosidase discovery from microbial culture. ***Glycoconjugate Journal*** 30, 791-800.

4. Carrington S.D., Irwin J.A., Liu L., Rudd P.M., Matthews E., and Corfield A.P. (2012): *Analysing mucin degradation.* ***Methods in Molecular Biology*** 842, 191-215.

3. Liu L., Telford J.E., Knezevic A., and Rudd P.M. (2010): *High-throughput glycoanalytical technology for systems glycobiology.* ***Biochemical Society Transactions*** 38, 1374-1377.

2. Liu L., O'Conner P., Cotter P.D., Hill C., and Ross R.P. (2008): *Controlling Listeria monocytogenes in Cottage cheese through heterologous production of enterocin A by Lactococcus lactis.* ***Journal of Applied Microbiology*** 104, 1059-1066.

1. Liu L., Kerry J.F., and Kerry J.P. (2007): *Application and assessment of extruded edible casings manufactured from pectin and gelatin/sodium alginate blends for use with breakfast pork sausage.* ***Meat Science*** 75, 196-202.

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