

Publication List Josef Voglmeir

as of October 2025

120. 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)
119. 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)
118. Hu Z.X., Zhang J.Y., van Ede J., Zhang Y.Y., Li Y.Q., Ghirardello 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)
117. Wei B., Liu L.†, Voglmeir J.† (2025): Novel PNGase H+ from *Amycolatopsis mediterranei*: Biochemical properties and food analysis potential. **Food Materials Research** 5: e015
116. 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.
115. 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.
114. Guo R.R., Heijs B., Wang W.J., Wuhler 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.
113. Zhang Y.Y., Ghirardello M., Williams R., Silva Diaz A., Rojo J., Voglmeir J, Ramos-Soriano J., and Galan M.C.* (2024): Microfluidics-Based Ionic Catch and Release Oligosaccharide Synthesis (ICROS-Microflow) to Expedite Glycosylation Chemistry. **JACS Au** 4(11):4328-4333.
112. 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.
111. 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.
110. 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.

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109. 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.
108. 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.
107. 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.
106. Flitsch S.L.†, Voglmeir J.† (2024): Chemo-enzymatic synthesis is spot on for ganglioside glycan libraries. **Nature Chemistry** (6):843-844.
105. 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 α 1,3-mannosidic linkages. **Carbohydrate Research** 538:109100.
104. 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).
103. 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.
102. 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.
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100. 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.
99. Guo R.R., Lageveen-Kammeijer G.S.M., Wang W., Dalebout H., Zhang W., Wuhler 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 Spectrometry and Capillary Electrophoresis Hyphenated with Mass Spectrometry via Electrospray Ionization. **Journal of Agricultural & Food Chemistry** 71 (9):4184-4192.
98. 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

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96. Ghirardello M.*, Zhang Y.Y., Voglmeir J., Galan M.C. (2022): Recent applications of ionic liquid-based tags in glycoscience. **Carbohydrate Research** 520:108643.
95. 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.
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92. 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.
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