

# Jennifer Jean Kohler

## List of Publications by Year in descending order

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Version: 2024-02-01

71  
papers

2,821  
citations

186265

28  
h-index

189892

50  
g-index

80  
all docs

80  
docs citations

80  
times ranked

3281  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Metabolic cross-talk allows labeling of O-linked N-acetylglucosamine-modified proteins via the N-acetylgalactosamine salvage pathway. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 3141-3146. | 7.1  | 301       |
| 2  | Photocrosslinkers illuminate interactions in living cells. Molecular BioSystems, 2008, 4, 473.   | 2.9  | 161       |
| 3  | Photoactivatable Crosslinking Sugars for Capturing Glycoprotein Interactions. Journal of the American Chemical Society, 2008, 130, 3278-3279.  | 13.7 | 147       |
| 4  | Metabolic labeling enables selective photocrosslinking of O-GlcNAc-modified proteins to their binding partners. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 4834-4839.                       | 7.1  | 127       |
| 5  | Photocrosslinking approaches to interactome mapping. Current Opinion in Chemical Biology, 2013, 17, 90-101.  | 6.1  | 115       |
| 6  | Kinetic Studies of Fos-Jun DNA Complex Formation: DNA Binding Prior to Dimerization. Biochemistry, 2001, 40, 130-142.  | 2.5  | 109       |
| 7  | DNA specificity enhanced by sequential binding of protein monomers. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 11735-11739.  | 7.1  | 103       |
| 8  | A Conserved Splicing Silencer Dynamically Regulates O-GlcNAc Transferase Intron Retention and O-GlcNAc Homeostasis. Cell Reports, 2017, 20, 1088-1099.   | 6.4  | 88        |
| 9  | Regulation of Intracellular Signaling by Extracellular Glycan Remodeling. ACS Chemical Biology, 2010, 5, 35-46.  | 3.4  | 86        |
| 10 | Photocrosslinking of glycoconjugates using metabolically incorporated diazirine-containing sugars. Nature Protocols, 2009, 4, 1044-1063.   | 12.0 | 82        |
| 11 | Hyposialylated IgG activates endothelial IgG receptor FcγRIIB to promote obesity-induced insulin resistance. Journal of Clinical Investigation, 2017, 128, 309-322.  | 8.2  | 82        |
| 12 | Fucosylation and protein glycosylation create functional receptors for cholera toxin. ELife, 2015, 4, e09545.  | 6.0  | 81        |
| 13 | Chemical methods for glycoprotein discovery. Current Opinion in Chemical Biology, 2007, 11, 52-58.   | 6.1  | 73        |
| 14 | Bump-and-Hole Engineering Identifies Specific Substrates of Glycosyltransferases in Living Cells. Molecular Cell, 2020, 78, 824-834.e15.   | 9.7  | 70        |
| 15 | Soluble klotho binds monosialoganglioside to regulate membrane microdomains and growth factor signaling. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 752-757.                                | 7.1  | 68        |
| 16 | Glycosylation of the Nuclear Pore. Traffic, 2014, 15, 347-361.   | 2.7  | 63        |
| 17 | GM1 ganglioside-independent intoxication by Cholera toxin. PLoS Pathogens, 2018, 14, e1006862.   | 4.7  | 57        |
| 18 | Conditional Glycosylation in Eukaryotic Cells Using a Biocompatible Chemical Inducer of Dimerization. Journal of the American Chemical Society, 2008, 130, 13186-13187.  | 13.7 | 55        |

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|----|--|-----|-----------|
| 19 | Chemical Modulation of Protein O-GlcNAcylation via OGT Inhibition Promotes Human Neural Cell Differentiation. <i>ACS Chemical Biology</i> , 2017, 12, 2030-2039.   | 3.4 | 53        |
| 20 | Metabolism of Diazirine-Modified N-Acetylmannosamine Analogues to Photo-Cross-Linking Sialosides. <i>Bioconjugate Chemistry</i> , 2011, 22, 1811-1823.   | 3.6 | 51        |
| 21 | Structural basis of O-GlcNAc recognition by mammalian 14-3-3 proteins. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 5956-5961.  | 7.1 | 50        |
| 22 | Regulating Cell Surface Glycosylation by Small Molecule Control of Enzyme Localization. <i>Chemistry and Biology</i> , 2003, 10, 1303-1311.  | 6.0 | 49        |
| 23 | Fucosylated Molecules Competitively Interfere with Cholera Toxin Binding to Host Cells. <i>ACS Infectious Diseases</i> , 2018, 4, 758-770.   | 3.8 | 42        |
| 24 | Pyrimidine Salvage Enzymes Are Essential for De Novo Biosynthesis of Deoxypyrimidine Nucleotides in <i>Trypanosoma brucei</i> . <i>PLoS Pathogens</i> , 2016, 12, e1006010.  | 4.7 | 39        |
| 25 | Advances in cell surface glycoengineering reveal biological function. <i>Glycobiology</i> , 2016, 26, 789-796.   | 2.5 | 39        |
| 26 | Metabolically incorporated photocrosslinking sialic acid covalently captures a ganglioside-protein complex. <i>Molecular BioSystems</i> , 2010, 6, 1796.   | 2.9 | 38        |
| 27 | Association of $\alpha$ -1,3-N-acetylglucosaminyltransferase 1 and $\alpha$ -1,4-galactosyltransferase 1, trans-Golgi enzymes involved in coupled poly-N-acetyllactosamine synthesis. <i>Glycobiology</i> , 2009, 19, 655-664. | 2.5 | 32        |
| 28 | Photocrosslinking probes for capture of carbohydrate interactions. <i>Current Opinion in Chemical Biology</i> , 2019, 53, 173-182.   | 6.1 | 32        |
| 29 | Characterization of the Pre-mRNA Binding Site for Yeast Ribosomal Protein L32: The Importance of a Purine-rich Internal Loop. <i>Journal of Molecular Biology</i> , 1995, 250, 447-459.  | 4.2 | 29        |
| 30 | Enhanced Transfer of a Photocross-linking N-Acetylglucosamine (GlcNAc) Analog by an O-GlcNAc Transferase Mutant with Converted Substrate Specificity. <i>Journal of Biological Chemistry</i> , 2015, 290, 22638-22648.         | 3.4 | 29        |
| 31 | A small-molecule switch for Golgi sulfotransferases. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 16715-16720.  | 7.1 | 27        |
| 32 | Sialidase Specificity Determined by Chemoselective Modification of Complex Sialylated Glycans. <i>ACS Chemical Biology</i> , 2012, 7, 1509-1514.   | 3.4 | 26        |
| 33 | Modeled structural basis for the recognition of $\alpha$ -sialyllactose by soluble Klotho. <i>FASEB Journal</i> , 2017, 31, 3574-3586.   | 0.5 | 25        |
| 34 | Cell type and receptor identity regulate cholera toxin subunit B (CTB) internalization. <i>Interface Focus</i> , 2019, 9, 20180076.  | 3.0 | 25        |
| 35 | Aniline: A Catalyst for Sialic Acid Detection. <i>ChemBioChem</i> , 2009, 10, 2147-2150.   | 2.6 | 24        |
| 36 | Cellular metabolism of unnatural sialic acid precursors. <i>Glycoconjugate Journal</i> , 2015, 32, 515-529.  | 2.7 | 23        |

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|----|---|-----|-----------|
| 37 | Modified GM3 gangliosides produced by metabolic oligosaccharide engineering. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2011, 21, 5006-5010.                                 | 2.2 | 21        |
| 38 | A photo-cross-linking GlcNAc analog enables covalent capture of N-linked glycoprotein-binding partners on the cell surface. <i>Cell Chemical Biology</i> , 2022, 29, 84-97.e8.        | 5.2 | 21        |
| 39 | Photoaffinity Probes for Studying Carbohydrate Biology. <i>Journal of Carbohydrate Chemistry</i> , 2012, 31, 325-352.   | 1.1 | 19        |
| 40 | Enhanced Cross-Linking of Diazirine-Modified Sialylated Glycoproteins Enabled through Profiling of Sialidase Specificities. <i>ACS Chemical Biology</i> , 2016, 11, 185-192.          | 3.4 | 19        |
| 41 | Effects of altered sialic acid biosynthesis on N-linked glycan branching and cell surface interactions. <i>Journal of Biological Chemistry</i> , 2017, 292, 9637-9651.                | 3.4 | 19        |
| 42 | Mass Spectrometric Method for the Unambiguous Profiling of Cellular Dynamic Glycosylation. <i>ACS Chemical Biology</i> , 2020, 15, 2692-2701.   | 3.4 | 19        |
| 43 | Human UDP-galactose 4-epimerase (GALE) is required for cell-surface glycome structure and function. <i>Journal of Biological Chemistry</i> , 2020, 295, 1225-1239.                    | 3.4 | 19        |
| 44 | Introduction to Glycosylation and Mass Spectrometry. <i>Methods in Molecular Biology</i> , 2013, 951, 1-17.   | 0.9 | 16        |
| 45 | Pneumococcal Neuraminidase Substrates Identified through Comparative Proteomics Enabled by Chemoselective Labeling. <i>Bioconjugate Chemistry</i> , 2016, 27, 1013-1022.              | 3.6 | 15        |
| 46 | Directing Flux in Glycan Biosynthetic Pathways with a Small Molecule Switch. <i>ChemBioChem</i> , 2004, 5, 1455-1458.   | 2.6 | 13        |
| 47 | Metabolic Labeling of Glycoconjugates with Photocrosslinking Sugars. <i>Methods in Enzymology</i> , 2010, 478, 541-562.   | 1.0 | 13        |
| 48 | Effects of N-glycosylation on the activity and localization of GlcNAc-6-sulfotransferase 1. <i>Glycobiology</i> , 2009, 19, 1068-1077.  | 2.5 | 12        |
| 49 | Human UDP-galactose 4-epimerase (GALE) is required for cell-surface glycome structure and function. <i>Journal of Biological Chemistry</i> , 2020, 295, 1225-1239.                    | 3.4 | 12        |
| 50 | Recognition of diazirine-modified O-GlcNAc by human O-GlcNAcase. <i>MedChemComm</i> , 2014, 5, 1227-1234.   | 3.4 | 10        |
| 51 | Effects of nucleic acids and polyanions on dimer formation and DNA binding by bZIP and bHLHZip transcription factors. <i>Bioorganic and Medicinal Chemistry</i> , 2001, 9, 2435-2443. | 3.0 | 9         |
| 52 | A Two-Hybrid Assay to Study Protein Interactions within the Secretory Pathway. <i>PLoS ONE</i> , 2010, 5, e15648.   | 2.5 | 9         |
| 53 | Glycan specificity of neuraminidases determined in microarray format. <i>Carbohydrate Research</i> , 2016, 428, 31-40.  | 2.3 | 9         |
| 54 | Interleukin-22 regulates B3GNT7 expression to induce fucosylation of glycoproteins in intestinal epithelial cells. <i>Journal of Biological Chemistry</i> , 2022, 298, 101463.        | 3.4 | 9         |

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|----|---|-----|-----------|
| 55 | Gene regulation: Protein escorts to the transcription ball. <i>Current Biology</i> , 1999, 9, R929-R932.  | 3.9 | 8         |
| 56 | Anomeric Fatty Acid Functionalization Prevents Nonenzymatic <i>S</i> -Glycosylation by Monosaccharide Metabolic Chemical Reporters. <i>ACS Chemical Biology</i> , 2021, 16, 1924-1929.                                  | 3.4 | 8         |
| 57 | Exo-Enzymatic Addition of Diazirine-Modified Sialic Acid to Cell Surfaces Enables Photocrosslinking of Glycoproteins. <i>Bioconjugate Chemistry</i> , 2022, 33, 781-787.  | 3.6 | 8         |
| 58 | Carb cutting works better with a partner. <i>Nature Structural and Molecular Biology</i> , 2017, 24, 433-435.   | 8.2 | 6         |
| 59 | 4-Deoxy-4-fluoro-GalNAz (4FGalNAz) Is a Metabolic Chemical Reporter of O-GlcNAc Modifications, Highlighting the Notable Substrate Flexibility of O-GlcNAc Transferase. <i>ACS Chemical Biology</i> , 2022, 17, 159-170. | 3.4 | 6         |
| 60 | A shift for the O-GlcNAc paradigm. <i>Nature Chemical Biology</i> , 2010, 6, 634-635.   | 8.0 | 4         |
| 61 | Synthesis of Cell-Permeable <i>N</i> -Acetylhexosamine 1-Phosphates. <i>Journal of Organic Chemistry</i> , 2021, 86, 18257-18264.   | 3.2 | 3         |
| 62 | Regulating Cell Surface Glycosylation with a Small-Molecule Switch. <i>Methods in Enzymology</i> , 2006, 415, 213-229.  | 1.0 | 2         |
| 63 | <i>Chemical Glycobiology</i> , 2010, , 175-224.   |     | 1         |
| 64 | Photocrosslinking Sugars for Capturing Glycan-dependent Interactions (Jpn. Ed.). <i>Trends in Glycoscience and Glycotechnology</i> , 2015, 27, J1-J7.   | 0.1 | 1         |
| 65 | Not All Quiet on the Sugar Front: Glycan Combatants in Host-Pathogen Interactions. <i>Biochemistry</i> , 2020, 59, 3061-3063.   | 2.5 | 1         |
| 66 | Photocrosslinking O-GlcNAcylated Proteins to Neighboring Biomolecules. <i>Current Protocols</i> , 2021, 1, e201.  | 2.9 | 1         |
| 67 | Photocrosslinking Sugars for Capturing Glycan-dependent Interactions. <i>Trends in Glycoscience and Glycotechnology</i> , 2015, 27, E1-E7.  | 0.1 | 1         |
| 68 | Recent Developments in Designing Compact Biological Photoprobes. , 2017, , 45-78.   |     | 0         |
| 69 | What sugar does to your pores. <i>Journal of Cell Biology</i> , 2021, 220, .  | 5.2 | 0         |
| 70 | Discovering the substrates of $\beta$ -1,4-galactosyltransferase by use of unnatural UDP-galactose analogs. <i>FASEB Journal</i> , 2008, 22, 1058.1.  | 0.5 | 0         |
| 71 | The Mammalian UDP-Galactose 4-Epimerase (GalE) Is Required for Cell Surface Glycome Structure and Function. <i>FASEB Journal</i> , 2019, 33, 798.6.   | 0.5 | 0         |