

# Hongzhi Cao

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8932834/publications.pdf>

Version: 2024-02-01

62  
papers

3,349  
citations

159358

30  
h-index

143772

57  
g-index

63  
all docs

63  
docs citations

63  
times ranked

3924  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Anticancer polysaccharides from natural resources: A review of recent research. <i>Carbohydrate Polymers</i> , 2012, 90, 1395-1410.  | 5.1  | 562       |
| 2  | Diversity in specificity, abundance, and composition of anti-Neu5Gc antibodies in normal humans: Potential implications for disease. <i>Glycobiology</i> , 2008, 18, 818-830.  | 1.3  | 297       |
| 3  | Amelioration of sepsis by inhibiting sialidase-mediated disruption of the CD24-SiglecG interaction. <i>Nature Biotechnology</i> , 2011, 29, 428-435.   | 9.4  | 158       |
| 4  | Human Xeno-Autoantibodies against a Non-Human Sialic Acid Serve as Novel Serum Biomarkers and Immunotherapeutics in Cancer. <i>Cancer Research</i> , 2011, 71, 3352-3363.  | 0.4  | 136       |
| 5  | A Sialylated Glycan Microarray Reveals Novel Interactions of Modified Sialic Acids with Proteins and Viruses. <i>Journal of Biological Chemistry</i> , 2011, 286, 31610-31622.                                       | 1.6  | 125       |
| 6  | Recent progress in chemical and chemoenzymatic synthesis of carbohydrates. <i>Current Opinion in Chemical Biology</i> , 2009, 13, 573-581.   | 2.8  | 124       |
| 7  | Structural characterization and antioxidant activities of $\hat{\text{I}}^{\text{P}}$ -carrageenan oligosaccharides degraded by different methods. <i>Food Chemistry</i> , 2015, 178, 311-318.                       | 4.2  | 121       |
| 8  | <i>Pasteurella multocida</i> sialic acid aldolase: a promising biocatalyst. <i>Applied Microbiology and Biotechnology</i> , 2008, 79, 963-70.  | 1.7  | 108       |
| 9  | Evidence for a novel human-specific xeno-auto-antibody response against vascular endothelium. <i>Blood</i> , 2009, 114, 5225-5235.   | 0.6  | 107       |
| 10 | Crystal Structures of <i>Pasteurella multocida</i> Sialyltransferase Complexes with Acceptor and Donor Analogues Reveal Substrate Binding Sites and Catalytic Mechanism,. <i>Biochemistry</i> , 2007, 46, 6288-6298. | 1.2  | 97        |
| 11 | Enzymatic Synthesis of Fluorinated Mechanistic Probes for Sialidases and Sialyltransferases. <i>Journal of the American Chemical Society</i> , 2007, 129, 10630-10631.   | 6.6  | 75        |
| 12 | Substrate Promiscuity of N-Acetylhexosamine 1-Kinases. <i>Molecules</i> , 2011, 16, 6396-6407.   | 1.7  | 74        |
| 13 | Sequential one-pot multienzyme (OPME) synthesis of lacto-N-neotetraose and its sialyl and fucosyl derivatives. <i>Chemical Communications</i> , 2015, 51, 7689-7692.   | 2.2  | 71        |
| 14 | Chemoenzymatic Synthesis of a New Class of Macrocyclic Oligosaccharides. <i>Journal of Organic Chemistry</i> , 2009, 74, 2928-2936.  | 1.7  | 66        |
| 15 | One-Pot Glycosylation (OPG) for the Chemical Synthesis of Oligosaccharides. <i>Current Organic Chemistry</i> , 2005, 9, 179-194.   | 0.9  | 58        |
| 16 | Sialidase substrate specificity studies using chemoenzymatically synthesized sialosides containing C5-modified sialic acids. <i>Organic and Biomolecular Chemistry</i> , 2009, 7, 5137.                              | 1.5  | 55        |
| 17 | Identifying selective inhibitors against the human cytosolic sialidase NEU2 by substrate specificity studies. <i>Molecular BioSystems</i> , 2011, 7, 1060.   | 2.9  | 53        |
| 18 | Reprogramming the enzymatic assembly line for site-specific fucosylation. <i>Nature Catalysis</i> , 2019, 2, 514-522.  | 16.1 | 52        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | Regioselective Chemoenzymatic Synthesis of Ganglioside Disialyl Tetrasaccharide Epitopes. <i>Journal of the American Chemical Society</i> , 2014, 136, 5205-5208.   | 6.6 | 51        |
| 20 | Chemoenzymatic synthesis of C8-modified sialic acids and related $\alpha$ -3- and $\alpha$ -6-linked sialosides. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2011, 21, 5037-5040.   | 1.0 | 50        |
| 21 | Detection and differentiation of influenza viruses with glycan-functionalized gold nanoparticles. <i>Biosensors and Bioelectronics</i> , 2017, 91, 46-52.   | 5.3 | 49        |
| 22 | Glycoengineering of Natural Killer Cells with CD22 Ligands for Enhanced Anticancer Immunotherapy. <i>ACS Central Science</i> , 2020, 6, 382-389.  | 5.3 | 49        |
| 23 | Anti-metastatic and anti-angiogenic activities of sulfated polysaccharide of <i>Sepiella maindroni</i> ink. <i>Carbohydrate Polymers</i> , 2013, 91, 403-409.   | 5.1 | 46        |
| 24 | NeuA Sialic Acid O-Acetyltransferase Activity Modulates O-Acetylation of Capsular Polysaccharide in Group B <i>Streptococcus</i> . <i>Journal of Biological Chemistry</i> , 2007, 282, 27562-27571.                                       | 1.6 | 45        |
| 25 | Chemoenzymatic synthesis of lacto-N-tetrasaccharide and sialyl lacto-N-tetrasaccharides. <i>Carbohydrate Research</i> , 2015, 401, 5-10.  | 1.1 | 45        |
| 26 | Chemoenzymatic Assembly of Mammalian $\alpha$ -Mannose Glycans. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 9003-9007.   | 7.2 | 44        |
| 27 | Probe sialidase substrate specificity using chemoenzymatically synthesized sialosides containing C9-modified sialic acid. <i>Chemical Communications</i> , 2012, 48, 3357.  | 2.2 | 40        |
| 28 | <i>Pasteurella multocida</i> CMP-sialic acid synthetase and mutants of <i>Neisseria meningitidis</i> CMP-sialic acid synthetase with improved substrate promiscuity. <i>Applied Microbiology and Biotechnology</i> , 2012, 93, 2411-2423. | 1.7 | 37        |
| 29 | Chemical preparation of sialyl Lewis x using an enzymatically synthesized sialoside building block. <i>Carbohydrate Research</i> , 2008, 343, 2863-2869.  | 1.1 | 36        |
| 30 | Quantum Dot Nanometal Surface Energy Transfer Based Biosensing of Sialic Acid Compositions and Linkages in Biological Samples. <i>Analytical Chemistry</i> , 2013, 85, 3864-3870.   | 3.2 | 35        |
| 31 | High-throughput neuraminidase substrate specificity study of human and avian influenza A viruses. <i>Virology</i> , 2011, 415, 12-19.   | 1.1 | 32        |
| 32 | Redox-Controlled Site-Specific $\alpha$ -6-Sialylation. <i>Journal of the American Chemical Society</i> , 2019, 141, 4547-4552.   | 6.6 | 31        |
| 33 | Anti-tumor activity and the mechanism of SIP-S: A sulfated polysaccharide with anti-metastatic effect. <i>Carbohydrate Polymers</i> , 2015, 129, 50-54.   | 5.1 | 30        |
| 34 | Diversity-Oriented Enzymatic Modular Assembly of ABO Histo-blood Group Antigens. <i>ACS Catalysis</i> , 2016, 6, 8140-8144.   | 5.5 | 30        |
| 35 | Sulphation pattern analysis of chemically sulphated polysaccharide LbGp1 from <i>Lycium barbarum</i> by GC-MS. <i>Food Chemistry</i> , 2015, 170, 22-29.  | 4.2 | 28        |
| 36 | Synthesis of selective inhibitors against <i>V. cholerae</i> sialidase and human cytosolic sialidase NEU2. <i>Organic and Biomolecular Chemistry</i> , 2012, 10, 6112.  | 1.5 | 25        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 37 | Successfully Engineering a Bacterial Sialyltransferase for Regioselective $\hat{\pm}$ 2,6-sialylation. <i>ACS Catalysis</i> , 2018, 8, 7222-7227.  | 5.5 | 24        |
| 38 | Chemoenzymatic synthesis of mono- and di-fluorinated Thomsenâ€Friedenreich (T) antigens and their sialylated derivatives. <i>Organic and Biomolecular Chemistry</i> , 2013, 11, 842-848.   | 1.5 | 23        |
| 39 | Chemoenzymatic Synthesis of <i>O</i> -Mannose Glycans Containing Sulfated or Nonsulfated HNK-1 Epitope. <i>Journal of the American Chemical Society</i> , 2019, 141, 19351-19359.  | 6.6 | 22        |
| 40 | Synthesis of a S-linked heparan sulfate trisaccharide as the substrate mimic of heparanase. <i>Tetrahedron Letters</i> , 2005, 46, 4337-4340.  | 0.7 | 21        |
| 41 | Chemoenzymatic Synthesis of 9NHAcâ€GD2 Antigen to Overcome the Hydrolytic Instability of <i>O</i> -Acetylatedâ€GD2 for Anticancer Conjugate Vaccine Development. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 24179-24188.                           | 7.2 | 21        |
| 42 | Structural Basis for Substrate Specificity and Mechanism of <i>N</i> -Acetyl- <i>D</i> -neuraminic Acid Lyase from <i>Pasteurella multocida</i> . <i>Biochemistry</i> , 2013, 52, 8570-8579.   | 1.2 | 20        |
| 43 | Chemoenzymatic synthesis of $\hat{\pm}$ -dystroglycan core M1 <i>O</i> -mannose glycans. <i>Chemical Communications</i> , 2015, 51, 11654-11657.   | 2.2 | 19        |
| 44 | Synthesis of Rare 6-Deoxy- <i>D</i> - <i>L</i> -Heptopyranosyl Fluorides: Assembly of a Hexasaccharide Corresponding to <i>Campylobacter jejuni</i> Strain CG8486 Capsular Polysaccharide. <i>Journal of the American Chemical Society</i> , 2021, 143, 11171-11179. | 6.6 | 19        |
| 45 | Parallel chemoenzymatic synthesis of sialosides containing a C5-diversified sialic acid. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2009, 19, 5869-5871.  | 1.0 | 18        |
| 46 | General Consideration on Sialic Acid Chemistry. <i>Methods in Molecular Biology</i> , 2012, 808, 31-56.  | 0.4 | 16        |
| 47 | Enzymatic modular synthesis and microarray assay of poly- <i>N</i> -acetylactosamine derivatives. <i>Chemical Communications</i> , 2020, 56, 7549-7552.  | 2.2 | 15        |
| 48 | The Cost-Efficiency Realization in the <i>Escherichia coli</i> -Based Cell-Free Protein Synthesis Systems. <i>Applied Biochemistry and Biotechnology</i> , 2014, 174, 2351-2367.   | 1.4 | 13        |
| 49 | Synthesis of Sialic Acids, Their Derivatives, and Analogs by Using a Wholeâ€Cell Catalyst. <i>Chemistry - A European Journal</i> , 2017, 23, 15143-15149.  | 1.7 | 13        |
| 50 | Synthesis of unsymmetrical 3,6-branched Man5 oligosaccharide: a comparison between one-pot sequential glycosylation and stepwise synthesis. <i>Carbohydrate Research</i> , 2015, 401, 109-114.   | 1.1 | 12        |
| 51 | Regioselective One-Pot Benzoylation of Triol and Tetraol Arrays in Carbohydrates. <i>Organic Letters</i> , 2018, 20, 3862-3865.  | 2.4 | 10        |
| 52 | $\hat{\pm}$ 2 Migration and concurrent glycosidation of phenyl 1-thio- $\hat{\pm}$ -mannopyranosides via 2,3- <i>O</i> -cyclic dioxonium intermediates. <i>Tetrahedron</i> , 2003, 59, 249-254.  | 1.0 | 9         |
| 53 | Enzymatic synthesis of human blood group P1 pentasaccharide antigen. <i>Carbohydrate Research</i> , 2017, 438, 39-43.  | 1.1 | 9         |
| 54 | Highly efficient biocatalytic cascade for the diversity-oriented synthesis of complex blood group Sd antigens. <i>Green Chemistry</i> , 2020, 22, 8002-8011.   | 4.6 | 7         |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 55 | A novel pentapeptide originated from calf thymus named TIPP shows an inhibitory effect on lung allergic inflammation. <i>International Immunopharmacology</i> , 2015, 24, 256-266.                                  | 1.7 | 6         |
| 56 | Enzymatic modular assembly of hybrid Lewis antigens. <i>Organic and Biomolecular Chemistry</i> , 2021, 19, 8041-8048.   | 1.5 | 4         |
| 57 | Liquid-Phase and Ultrahigh-Frequency-Acoustofluidics-Based Solid-Phase Synthesis of Biotin-Tagged 6â€²/3â€²-Sialyl-N-Acetylglucosamine by Sequential One-Pot Multienzyme System. <i>Catalysts</i> , 2020, 10, 1347. | 1.6 | 3         |
| 58 | Improve Stability of Bioactive Peptides by Enzymatic Modular Synthesis of Peptides with <i>O</i>-Linked Sialyl Lewis x. <i>ACS Catalysis</i> , 2021, 11, 8042-8048.   | 5.5 | 2         |
| 59 | Chemoenzymatic synthesis of tumor-associated antigen N3 minor octasaccharide. <i>Journal of Carbohydrate Chemistry</i> , 2016, 35, 412-422.   | 0.4 | 1         |
| 60 | The 2nd National Conference on Synthetic Carbohydrate Chemistry, Chinese Chemical Society (CARB) Tj ETQq0 0 Q,rgBT /Overlock 10 T   | 0.4 | 0         |
| 61 | Installation of high-affinity Siglec-1 ligand on tumor surface for macrophage-engaged tumor suppression. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2021, 50, 128328.                                      | 1.0 | 0         |
| 62 | Recent Advances in the Synthesis of Heparan Sulfate Oligosaccharides. <i>Chinese Journal of Organic Chemistry</i> , 2012, 32, 1388.   | 0.6 | 0         |