

Weston B Struwe

List of Publications by Year in descending order

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96
papers

5,350
citations

76326

40
h-index

98798

67
g-index

107
all docs

107
docs citations

107
times ranked

7169
citing authors

#	ARTICLE	IF	CITATIONS
1	Quantitative mass imaging of single biological macromolecules. <i>Science</i> , 2018, 360, 423-427.	12.6	453
2	The role of interfacial lipids in stabilizing membrane protein oligomers. <i>Nature</i> , 2017, 541, 421-424.	27.8	344
3	Composition and Antigenic Effects of Individual Glycan Sites of a Trimeric HIV-1 Envelope Glycoprotein. <i>Cell Reports</i> , 2016, 14, 2695-2706.	6.4	250
4	High-resolution mass spectrometry of small molecules bound to membrane proteins. <i>Nature Methods</i> , 2016, 13, 333-336.	19.0	205
5	Quantifying the heterogeneity of macromolecular machines by mass photometry. <i>Nature Communications</i> , 2020, 11, 1772.	12.8	146
6	UniCarb-DB: a database resource for glycomic discovery. <i>Bioinformatics</i> , 2011, 27, 1343-1344.	4.1	128
7	Method for milk oligosaccharide profiling by 2-aminobenzamide labeling and hydrophilic interaction chromatography. <i>Glycobiology</i> , 2011, 21, 1317-1330.	2.5	128
8	Optimal Synthetic Glycosylation of a Therapeutic Antibody. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 2361-2367.	13.8	122
9	Site-Specific Glycosylation of Virion-Derived HIV-1 Env Is Mimicked by a Soluble Trimeric Immunogen. <i>Cell Reports</i> , 2018, 24, 1958-1966.e5.	6.4	120
10	MIRAGE: The minimum information required for a glycomics experiment. <i>Glycobiology</i> , 2014, 24, 402-406.	2.5	116
11	Glycan Fingerprinting via Cold-Atom Infrared Spectroscopy. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 11248-11251.	13.8	116
12	Glycosylation of liver acute-phase proteins in pancreatic cancer and chronic pancreatitis. <i>Proteomics - Clinical Applications</i> , 2010, 4, 432-448.	1.6	115
13	The Minimum Information Required for a Glycomics Experiment (MIRAGE) Project: Improving the Standards for Reporting Mass-spectrometry-based Glycoanalytic Data. <i>Molecular and Cellular Proteomics</i> , 2013, 12, 991-995.	3.8	109
14	EndoS2 is a unique and conserved enzyme of serotype M49 group A <i>Streptococcus</i> that hydrolyses N-linked glycans on IgG and β 1-acid glycoprotein. <i>Biochemical Journal</i> , 2013, 455, 107-118.	3.7	95
15	N-glycan microheterogeneity regulates interactions of plasma proteins. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 8763-8768.	7.1	94
16	Glycosylation and Fc Receptors. <i>Current Topics in Microbiology and Immunology</i> , 2014, 382, 165-199.	1.1	89
17	Identification of N-Glycosylation Changes in the CSF and Serum in Patients with Schizophrenia. <i>Journal of Proteome Research</i> , 2010, 9, 4476-4489.	3.7	87
18	Estimating Collision Cross Sections of Negatively Charged N-Glycans using Traveling Wave Ion Mobility-Mass Spectrometry. <i>Analytical Chemistry</i> , 2014, 86, 10789-10795.	6.5	86

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19	Molecular Architecture of the Cleavage-Dependent Mannose Patch on a Soluble HIV-1 Envelope Glycoprotein Trimer. <i>Journal of Virology</i> , 2017, 91, .	3.4	77
20	GlycoMob: an ion mobility-mass spectrometry collision cross section database for glycomics. <i>Glycoconjugate Journal</i> , 2016, 33, 399-404.	2.7	73
21	Quantifying Protein-Protein Interactions by Molecular Counting with Mass Photometry. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 10774-10779.	13.8	72
22	Towards a standardized bioinformatics infrastructure for N- and O-glycomics. <i>Nature Communications</i> , 2019, 10, 3275.	12.8	70
23	The minimum information required for a glycomics experiment (MIRAGE) project: improving the standards for reporting glycan microarray-based data. <i>Glycobiology</i> , 2017, 27, 280-284.	2.5	69
24	Assessing Antigen Structural Integrity through Glycosylation Analysis of the SARS-CoV-2 Viral Spike. <i>ACS Central Science</i> , 2021, 7, 586-593.	11.3	68
25	Exploring the Glycosylation of Serum CA125. <i>International Journal of Molecular Sciences</i> , 2013, 14, 15636-15654.	4.1	67
26	Structures of mammalian ER α -glucosidase II capture the binding modes of broad-spectrum iminosugar antivirals. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, E4630-8.	7.1	65
27	5-AZA-2'-deoxycytidine induced demethylation influences N-glycosylation of secreted glycoproteins in ovarian cancer. <i>Epigenetics</i> , 2011, 6, 1362-1372.	2.7	63
28	The minimum information required for a glycomics experiment (MIRAGE) project: sample preparation guidelines for reliable reporting of glycomics datasets. <i>Glycobiology</i> , 2016, 26, 907-910.	2.5	62
29	Fc Gamma Receptor Glycosylation Modulates the Binding of IgG Glycoforms: A Requirement for Stable Antibody Interactions. <i>Journal of Proteome Research</i> , 2014, 13, 5471-5485.	3.7	61
30	Identification of Lewis and Blood Group Carbohydrate Epitopes by Ion Mobility-Tandem-Mass Spectrometry Fingerprinting. <i>Analytical Chemistry</i> , 2017, 89, 2318-2325.	6.5	57
31	Reducing V3 Antigenicity and Immunogenicity on Soluble, Native-Like HIV-1 Env SOSIP Trimers. <i>Journal of Virology</i> , 2017, 91, .	3.4	57
32	UniCarbKB: Putting the pieces together for glycomics research. <i>Proteomics</i> , 2011, 11, 4117-4121.	2.2	55
33	In-depth structural analysis of glycans in the gas phase. <i>Chemical Science</i> , 2019, 10, 1272-1284.	7.4	52
34	Structural principles that enable oligomeric small heat-shock protein paralogs to evolve distinct functions. <i>Science</i> , 2018, 359, 930-935.	12.6	51
35	Fucose Migration in Intact Protonated Glycan Ions: A Universal Phenomenon in Mass Spectrometry. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 7440-7443.	13.8	51
36	The COVID-19 MS Coalition "accelerating diagnostics, prognostics, and treatment. <i>Lancet</i> , The, 2020, 395, 1761-1762.	13.7	51

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37	A bipartite structural organization defines the SERINC family of HIV-1 restriction factors. <i>Nature Structural and Molecular Biology</i> , 2020, 27, 78-83.	8.2	50
38	Probing <i>N</i> -glycoprotein microheterogeneity by lectin affinity purification-mass spectrometry analysis. <i>Chemical Science</i> , 2019, 10, 5146-5155.	7.4	49
39	Characterization of Fibrinogen Glycosylation and Its Importance for Serum/Plasma <i>N</i> -Glycome Analysis. <i>Journal of Proteome Research</i> , 2013, 12, 444-454.	3.7	48
40	Relating glycoprotein structural heterogeneity to function – insights from native mass spectrometry. <i>Current Opinion in Structural Biology</i> , 2019, 58, 241-248.	5.7	48
41	Immune recruitment or suppression by glycan engineering of endogenous and therapeutic antibodies. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2016, 1860, 1655-1668.	2.4	47
42	Single molecule mass photometry of nucleic acids. <i>Nucleic Acids Research</i> , 2020, 48, e97-e97.	14.5	42
43	Separation of Isomeric <i>O</i> -Glycans by Ion Mobility and Liquid Chromatography–Mass Spectrometry. <i>Analytical Chemistry</i> , 2019, 91, 10604-10613.	6.5	40
44	The Tetrameric Plant Lectin BanLec Neutralizes HIV through Bidentate Binding to Specific Viral Glycans. <i>Structure</i> , 2017, 25, 773-782.e5.	3.3	39
45	A Mass Spectrometry–Based Modelling Workflow for Accurate Prediction of IgG Antibody Conformations in the Gas Phase. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 17194-17199.	13.8	39
46	Shotgun ion mobility mass spectrometry sequencing of heparan sulfate saccharides. <i>Nature Communications</i> , 2020, 11, 1481.	12.8	39
47	Mass Photometry of Membrane Proteins. <i>CheM</i> , 2021, 7, 224-236.	11.7	39
48	Presence of terminal N-acetylgalactosamine ² 1-4N-acetylglucosamine residues on O-linked oligosaccharides from gastric MUC5AC: Involvement in <i>Helicobacter pylori</i> colonization?. <i>Glycobiology</i> , 2012, 22, 1077-1085.	2.5	37
49	Increase in Sialylation and Branching in the Mouse Serum N-glycome Correlates with Inflammation and Ovarian Tumour Progression. <i>PLoS ONE</i> , 2013, 8, e71159.	2.5	37
50	Studying the active-site loop movement of the São Paulo metallo- β -lactamase-1. <i>Chemical Science</i> , 2015, 6, 956-963.	7.4	36
51	Mass Spectrometric Quantification of N-Linked Glycans by Reference to Exogenous Standards. <i>Journal of Proteome Research</i> , 2016, 15, 2969-2980.	3.7	36
52	Galactosyltransferase 4 is a major control point for glycan branching in <i>N</i> -linked glycosylation. <i>Journal of Cell Science</i> , 2014, 127, 5014-26.	2.0	35
53	Travelling-wave ion mobility and negative ion fragmentation of high-mannose <i>N</i> -glycans. <i>Journal of Mass Spectrometry</i> , 2016, 51, 219-235.	1.6	34
54	Global N-Glycan Site Occupancy of HIV-1 gp120 by Metabolic Engineering and High-Resolution Intact Mass Spectrometry. <i>ACS Chemical Biology</i> , 2017, 12, 357-361.	3.4	34

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55	Identification of O-glycan Structures from Chicken Intestinal Mucins Provides Insight into <i>Campylobacter jejuni</i> Pathogenicity*. <i>Molecular and Cellular Proteomics</i> , 2015, 14, 1464-1477.	3.8	32
56	Convergent immunological solutions to Argentine hemorrhagic fever virus neutralization. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 7031-7036.	7.1	31
57	Signature of Antibody Domain Exchange by Native Mass Spectrometry and Collision-Induced Unfolding. <i>Analytical Chemistry</i> , 2018, 90, 7325-7331.	6.5	31
58	The Jumonji-C oxygenase JMJD7 catalyzes (3S)-lysyl hydroxylation of TRAFAC GTPases. <i>Nature Chemical Biology</i> , 2018, 14, 688-695.	8.0	31
59	Hyper-truncated Asn355- and Asn391-glycans modulate the activity of neutrophil granule myeloperoxidase. <i>Journal of Biological Chemistry</i> , 2021, 296, 100144.	3.4	31
60	Native Mass Spectrometry: Towards High-Throughput Structural Proteomics. <i>Methods in Molecular Biology</i> , 2015, 1261, 349-371.	0.9	31
61	The minimum information required for a glycomics experiment (MIRAGE) project: LC guidelines. <i>Glycobiology</i> , 2019, 29, 349-354.	2.5	30
62	<i>N</i> -Linked Glycan Structures of the Human Fc γ 3 Receptors Produced in NS0 Cells. <i>Journal of Proteome Research</i> , 2013, 12, 3721-3737.	3.7	28
63	Travelling-wave ion mobility mass spectrometry and negative ion fragmentation of hybrid and complex <i>N</i> -glycans. <i>Journal of Mass Spectrometry</i> , 2016, 51, 1064-1079.	1.6	28
64	EndoE from <i>Enterococcus faecalis</i> Hydrolyzes the Glycans of the Biofilm Inhibiting Protein Lactoferrin and Mediates Growth. <i>PLoS ONE</i> , 2014, 9, e91035.	2.5	28
65	The conserved oligomeric Golgi complex is required for fucosylation of N-glycans in <i>Caenorhabditis elegans</i> . <i>Glycobiology</i> , 2012, 22, 863-875.	2.5	26
66	Collision Cross Sections and Ion Mobility Separation of Fragment Ions from Complex N-Glycans. <i>Journal of the American Society for Mass Spectrometry</i> , 2018, 29, 1250-1261.	2.8	26
67	Glycosylation profiling to evaluate glycoprotein immunogens against HIV-1. <i>Expert Review of Proteomics</i> , 2017, 14, 881-890.	3.0	24
68	Integrity of Glycosylation Processing of a Glycan-Depleted Trimeric HIV-1 Immunogen Targeting Key B-Cell Lineages. <i>Journal of Proteome Research</i> , 2018, 17, 987-999.	3.7	23
69	Structural Studies of Fucosylated <i>N</i> -Glycans by Ion Mobility Mass Spectrometry and Collision-Induced Fragmentation of Negative Ions. <i>Journal of the American Society for Mass Spectrometry</i> , 2018, 29, 1179-1193.	2.8	22
70	Isomer Information from Ion Mobility Separation of High-Mannose Glycan Fragments. <i>Journal of the American Society for Mass Spectrometry</i> , 2018, 29, 972-988.	2.8	21
71	Separation of isomeric glycans by ion mobility spectrometry – the impact of fluorescent labelling. <i>Analyst</i> , 2019, 144, 5292-5298.	3.5	21
72	Modeling a congenital disorder of glycosylation type I in <i>C. elegans</i> : A genome-wide RNAi screen for N-glycosylation-dependent loci. <i>Glycobiology</i> , 2009, 19, 1554-1562.	2.5	18

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73	Structural characterization and biological implications of sulfated N-glycans in a serine protease from the neotropical moth <i>Hylesia metabus</i> (Cramer [1775]) (Lepidoptera: Saturniidae). <i>Glycobiology</i> , 2015, 26, cwv096.	2.5	18
74	Label-free methods for optical <i>in vitro</i> characterization of protein-protein interactions. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 16488-16500.	2.8	18
75	Fingerabdrücke für Glykane durch Spektroskopie kalter Ionen. <i>Angewandte Chemie</i> , 2017, 129, 11400-11404.	2.0	16
76	State-of-the-art glycosaminoglycan characterization. <i>Mass Spectrometry Reviews</i> , 2022, 41, 1040-1071.	5.4	16
77	Antibody production using a ciliate generates unusual antibody glycoforms displaying enhanced cell-killing activity. <i>MAbs</i> , 2016, 8, 1498-1511.	5.2	14
78	High-Throughput RNAi Screening for N-Glycosylation Dependent Loci in <i>Caenorhabditis elegans</i> . <i>Methods in Enzymology</i> , 2010, 480, 477-493.	1.0	12
79	Correlating Glycoforms of DC-SIGN with Stability Using a Combination of Enzymatic Digestion and Ion Mobility Mass Spectrometry. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 15560-15564.	13.8	12
80	Native Mass Spectrometry Meets Glycomics: Resolving Structural Detail and Occupancy of Glycans on Intact Glycoproteins. <i>Analytical Chemistry</i> , 2021, 93, 10435-10443.	6.5	12
81	Ejection of structural zinc leads to inhibition of β^3 -butyrobetaine hydroxylase. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2014, 24, 4954-4957.	2.2	11
82	Quantifying Protein-Protein Interactions by Molecular Counting with Mass Photometry. <i>Angewandte Chemie</i> , 2020, 132, 10866-10871.	2.0	11
83	Expression, Purification, and Biochemical Characterization of Human Afamin. <i>Journal of Proteome Research</i> , 2018, 17, 1269-1277.	3.7	8
84	Structural Insights into the Broad-Spectrum Antiviral Target Endoplasmic Reticulum Alpha-Glucosidase II. <i>Advances in Experimental Medicine and Biology</i> , 2018, 1062, 265-276.	1.6	8
85	Fucose-Migration in intakten protonierten Glykan-Ionen – ein universelles Phänomen in der Massenspektrometrie. <i>Angewandte Chemie</i> , 2018, 130, 7562-7565.	2.0	7
86	Aminoquinolines as fluorescent labels for hydrophilic interaction liquid chromatography of oligosaccharides. <i>Biological Chemistry</i> , 2012, 393, 757-765.	2.5	6
87	Custom Design of Protein Particles as Multifunctional Biomaterials. <i>Advanced Functional Materials</i> , 2022, 32, 2108039.	14.9	6
88	A Mass Spectrometry-Based Modelling Workflow for Accurate Prediction of IgG Antibody Conformations in the Gas Phase. <i>Angewandte Chemie</i> , 2018, 130, 17440-17445.	2.0	5
89	Ion Mobility-Mass Spectrometry of Glycoconjugates. <i>Methods in Molecular Biology</i> , 2020, 2084, 203-219.	0.9	4
90	Correlating Glycoforms of DC-SIGN with Stability Using a Combination of Enzymatic Digestion and Ion Mobility Mass Spectrometry. <i>Angewandte Chemie</i> , 2020, 132, 15690-15694.	2.0	3

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91	Identification of N-glycans with GalNAc-containing antennae from recombinant HIV trimers by ion mobility and negative ion fragmentation. <i>Analytical and Bioanalytical Chemistry</i> , 2021, 413, 7229-7240.	3.7	1
92	Glycoproteomics in Health and Disease. , 2010, , 1-38.		1
93	Probing the Effect of Lipid Binding on the Monomer-Dimer Equilibrium of a Prokaryotic Sugar Transporter by Native Mass Spectrometry. <i>Biophysical Journal</i> , 2016, 110, 423a.	0.5	0
94	Frontispiz: Quantifying Protein-Protein Interactions by Molecular Counting with Mass Photometry. <i>Angewandte Chemie</i> , 2020, 132, .	2.0	0
95	Frontispiece: Quantifying Protein-Protein Interactions by Molecular Counting with Mass Photometry. <i>Angewandte Chemie - International Edition</i> , 2020, 59, .	13.8	0
96	Formation and fragmentation of doubly and triply charged ions in the negative ion spectra of neutral N-glycans from viral and other glycoproteins. <i>Analytical and Bioanalytical Chemistry</i> , 2021, 413, 7277-7294.	3.7	0