Thomas Peters

List of Publications by Year
in descending order

113 papers	4,880 citations	109321 35 h-index	102487 66 g-index
132 all docs	132 docs citations	132 times ranked	4200 citing authors

#	Article	IF	Citations
1	Assignment of Ala, Ile, LeuproS, Met, and ValproS methyl groups of the protruding domain of murine norovirus capsid protein VP1 using methylâ€“methyl NOEs, site directed mutagenesis, and pseudocontact shifts. Biomolecular NMR Assignments, 2022, 16, 97-107.	0.8	2
2	Norovirusâ€“glycan interactions â€” how strong are they really?. Biochemical Society Transactions, 2022, 50, 347-359.	3.4	9
3	Distinct dissociation rates of murine and human norovirus P-domain dimers suggest a role of dimer stability in virus-host interactions. Communications Biology, 2022, 5, .	4.4	4
4	NMR Experiments Provide Insights into Ligand-Binding to the SARS-CoV-2 Spike Protein Receptor-Binding Domain. Journal of the American Chemical Society, 2022, 144, 13060-13065.	13.7	7
5	NMR Experiments Shed New Light on Glycan Recognition by Human and Murine Norovirus Capsid Proteins. Viruses, 2021, 13, 416.	3.3	15
6	Glycan-Induced Protein Dynamics in Human Norovirus P Dimers Depend on Virus Strain and Deamidation Status. Molecules, 2021, 26, 2125.	3.8	13
7	Protein Secondary Structure Affects Glycan Clustering in Native Mass Spectrometry. Life, 2021, 11, 554.	2.4	7
8	Chemicalâ€Shift Perturbations Reflect Bile Acid Binding to Norovirus Coat Protein: Recognition Comes in Different Flavors. ChemBioChem, 2020, 21, 1007-1021.	2.6	14
9	Insights into Allosteric Control of Human Blood Group A and B Glycosyltransferases from Dynamic NMR. ChemistryOpen, 2019, 8, 760-769.	1.9	3
10	Fragment Growing to Design Optimized Inhibitors for Human Blood Groupâ€…B Galactosyltransferase (GTB). ChemMedChem, 2019, 14, 1336-1342.	3.2	4
11	A post-translational modification of human Norovirus capsid protein attenuates glycan binding. Nature Communications, 2019, 10, 1320.	12.8	50
12	Substrate Binding Drives Activeâ€Site Closing of Human Blood Groupâ€…B Galactosyltransferase as Revealed by Hotâ€Spot Labeling and NMR Spectroscopy Experiments. ChemBioChem, 2018, 19, 970-978.	2.6	4
13	Complete assignment of Ala, Ile, Leu, Met and Val methyl groups of human blood group A and B glycosyltransferases using lanthanide-induced pseudocontact shifts and methylâ€“methyl NOESY. Journal of Biomolecular NMR, 2018, 70, 245-259.	2.8	10
14	Norovirus, glycans and attachment. Current Opinion in Virology, 2018, 31, 33-42.	5.4	19
15	Fucose-Functionalized Precision Glycomacromolecules Targeting Human Norovirus Capsid Protein. Biomacromolecules, 2018, 19, 3714-3724.	5.4	25
16	Spin ballet for sweet encounters: saturation-transfer difference NMR and X-ray crystallography complement each other in the elucidation of proteinâ€“glycan interactions. Acta Crystallographica Section F, Structural Biology Communications, 2018, 74, 451-462.	0.8	22
17	Protein NMR Studies of Substrate Binding to Human Blood Groupâ€…A and B Glycosyltransferases. ChemBioChem, 2017, 18, 1260-1269.	2.6	6
18	High-resolution crystal structures and STD NMR mapping of human ABO(H) blood group glycosyltransferases in complex with trisaccharide reaction products suggest a molecular basis for product release. Glycobiology, 2017, 27, 966-977.	2.5	3

#	Article	IF	Citations
19	STD-NMR experiments identify a structural motif with novel second-site activity against West Nile virus NS2B-NS3 protease. Antiviral Research, 2017, 146, 174-183.	4.1	6
20	Human norovirus GII.4(MI001) P dimer binds fucosylated and sialylated carbohydrates. Glycobiology, 2017, 27, 1027-1037.	2.5	23
21	Epitope mapping of histo blood group antigens bound to norovirus VLPs using STD NMR experiments reveals fine details of molecular recognition. Glycoconjugate Journal, 2017, 34, 679-689.	2.7	18
22	Saturation transfer difference nuclear magnetic resonance titrations reveal complex multistep-binding of l-fucose to norovirus particles. Glycobiology, 2017, 27, 80-86.	2.5	17
23	A rigid lanthanide binding tag to aid NMR studies of a 70 kDa homodimeric coat protein of human norovirus. Chemical Communications, 2016, 52, 601-604.	4.1	13
24	Attachment of Norovirus to Histo Blood Group Antigens: Aâ€…Cooperative Multistep Process. Angewandte Chemie - International Edition, 2015, 54, 12014-12019.	13.8	37
25	Thermodynamic Signature of Substrates and Substrate Analogs Binding to Human Blood Group B Galactosyltransferase from Isothermal Titration Calorimetry Experiments. Biopolymers, 2013, 99, 784-795.	2.4	11
26	A Nonionic Inhibitor with High Specificity for the UDP-Gal Donor Binding Site of Human Blood Group B Galactosyltransferase: Design, Synthesis, and Characterization. Journal of Medicinal Chemistry, 2013, 56, 2150-2154.	6.4	10
27	A Structure-Guided Mutation in the Major Capsid Protein Retargets BK Polyomavirus. PLoS Pathogens, 2013, 9, e1003688.	4.7	70
28	Structures of Merkel Cell Polyomavirus VP1 Complexes Define a Sialic Acid Binding Site Required for Infection. PLoS Pathogens, 2012, 8, e1002738.	4.7	79
29	Functional binding of hexanucleotides to 3C protease of hepatitis A virus. Nucleic Acids Research, 2012, 40, 3042-3055.	14.5	16
30	Small molecules containing hetero-bicyclic ring systems compete with UDP-Glc for binding to WaaG glycosyltransferase. Glycoconjugate Journal, 2012, 29, 491-502.	2.7	12
31	A Matter of Order: How Eâ€Selectin Makes Sweet Contacts. ChemBioChem, 2012, 13, 2325-2326.	2.6	1
32	A Glycosyltransferase Inhibitor from a Molecular Fragment Library Simultaneously Interferes with Metal Ion and Substrate Binding. Angewandte Chemie - International Edition, 2012, 51, 4171-4175.	13.8	19
33	A New Concept for Glycosyltransferase Inhibitors: Nonionic Mimics of the Nucleotide Donor of the Human Blood Group B Galactosyltransferase. ChemBioChem, 2012, 13, 443-450.	2.6	21
34	Molecular Details of the Recognition of Blood Group Antigens by a Human Norovirus as Determined by STD NMR Spectroscopy. Angewandte Chemie - International Edition, 2012, 51, 928-932.	13.8	61
35	Insights into Neuronal Cell Metabolism Using NMR Spectroscopy: Uridyl Diphosphate Nâ€Acetylâ€Glucosamine as a Unique Metabolic Marker. Angewandte Chemie - International Edition, 2011, 50, 11672-11674.	13.8	6
36	â€œDoubleâ€Clickâ€•Protocol for Synthesis of Heterobifunctional Multivalent Ligands: Toward a Focused Library of Specific Norovirus Inhibitors. Chemistry - A European Journal, 2011, 17, 7438-7441.	3.3	26

#	Article	IF	Citations
37	Targeting Norovirus Infectionâ€"Multivalent Entry Inhibitor Design Based on NMR Experiments. Chemistry - A European Journal, 2011, 17, 7442-7453.	3.3	62
38	NMR-based exploration of the acceptor binding site of human blood group B galactosyltransferase with molecular fragments. Glycoconjugate Journal, 2010, 27, 349-358.	2.7	17
39	Binding of an acceptor substrate analog enhances the enzymatic activity of human blood group B galactosyltransferase. Glycobiology, 2010, 20, 718-723.	2.5	30
40	Structure-based discovery of antivirals targeting the proteases of RNA viruses. Acta Crystallographica Section A: Foundations and Advances, 2010, 66, s33-s33.	0.3	0
41	The Î±Gal Epitope of the Histo-Blood Group Antigen Family Is a Ligand for Bovine Norovirus Newbury2 Expected to Prevent Cross-Species Transmission. PLoS Pathogens, 2009, 5, e1000504.	4.7	71
42	Specificity of ligand binding to yeast hexokinase PII studied by STD-NMR. Carbohydrate Research, 2009, 344, 1567-1574.	2.3	9
43	Consistent Bioactive Conformation of the Neu5AcÎ±(2â†'3)Gal Epitope Upon Lectin Binding. ChemBioChem, 2008, 9, 2941-2945.	2.6	20
44	NMR Experiments Reveal the Molecular Basis of Receptor Recognition by a Calicivirus. Journal of the American Chemical Society, 2008, 130, 3669-3675.	13.7	80
45	Characterization of Ligand Binding to N-Acetylglucosamine Kinase Studied by STD NMR. Biochemistry, 2008, 47, 13138-13146.	2.5	16
46	Molecular Recognition of Ligands by Native Viruses and Virus-Like Particles as Studied by NMR Experiments. Topics in Current Chemistry, 2008, 273, 183-202.	4.0	18
47	Discovery and Optimization of a Natural HIV-1 Entry Inhibitor Targeting the gp41 Fusion Peptide. Cell, 2007, 129, 263-275.	28.9	244
48	Ligand Specificity of CS-35, a Monoclonal Antibody That Recognizes Mycobacterial Lipoarabinomannan:â€‰A Model System for Oligofuranosideâ^'Protein Recognition. Journal of the American Chemical Society, 2007, 129, 10489-10502.	13.7	77
49	Donor substrate binding to trans-sialidase of Trypanosoma cruzi as studied by STD NMR. Carbohydrate Research, 2007, 342, 1904-1909.	2.3	10
50	NMR Analysis of Carbohydrateâ€"Protein Interactions. Methods in Enzymology, 2006, 416, 12-30.	1.0	32
51	Blood Group B Galactosyltransferase:Â Insights into Substrate Binding from NMR Experiments. Journal of the American Chemical Society, 2006, 128, 13529-13538.	13.7	68
52	Assaying Sialyltransferase Activity with Surface Plasmon Resonance. ChemBioChem, 2006, 7, 1226-1230.	2.6	5
53	Fragment-based Screening of the Donor Substrate Specificity of Human Blood Group B Galactosyltransferase Using Saturation Transfer Difference NMR. Journal of Biological Chemistry, 2006, 281, 32728-32740.	3.4	26
54	Hepatitis A virus proteinase 3C binding to viral RNA: correlation with substrate binding and enzyme dimerization. Biochemical Journal, 2005, 385, 363-370.	3.7	26

#	Article	IF	Citations
55	Neutralization of a common cold virus by concatemers of the third ligand binding module of the VLDL-receptor strongly depends on the number of modules. Virology, 2005, 338, 259-269.	2.4	32
56	Comparative Epitope Mapping with Saturation Transfer Difference NMR of Sialyl LewisaCompounds and Derivatives Bound to a Monoclonal Antibody. Journal of Medicinal Chemistry, 2005, 48, 6879-6886.	6.4	25
57	Characterization of Ligand Binding to the Bifunctional Key Enzyme in the Sialic Acid Biosynthesis by NMR. Journal of Biological Chemistry, 2004, 279, 55722-55727.	3.4	24
58	Characterization of Ligand Binding to the Bifunctional Key Enzyme in the Sialic Acid Biosynthesis by NMR. Journal of Biological Chemistry, 2004, 279, 55715-55721.	3.4	22
59	Saturation transfer difference NMR and computational modeling of a sialoadhesinâ€“sialyl lactose complex. Carbohydrate Research, 2004, 339, 259-267.	2.3	37
60	Refinement of the Conformation of UDPâ^'Galactose Bound to Galactosyltransferase Using the STD NMR Intensity-Restrained CORCEMA Optimization. Journal of the American Chemical Society, 2004, 126, 8610-8611.	13.7	46
61	NMR-Techniken zum Screening und zur Identifizierung der Bindung von Liganden an Proteinrezeptoren. Angewandte Chemie, 2003, 115, 890-918.	2.0	147
62	NMR Spectroscopy Techniques for Screening and Identifying Ligand Binding to Protein Receptors.. ChemInform, 2003, 34, no.	0.0	0
63	NMR Spectroscopy Techniques for Screening and Identifying Ligand Binding to Protein Receptors. Angewandte Chemie - International Edition, 2003, 42, 864-890.	13.8	915
64	Virusâ^'Ligand Interactions:Â Identification and Characterization of Ligand Binding by NMR Spectroscopy. Journal of the American Chemical Society, 2003, 125, 14-15.	13.7	196
65	Epitope mapping of sialyl Lewisx bound to E-selectin using saturation transfer difference NMR experiments. Glycobiology, 2003, 13, 435-443.	2.5	42
66	NMR Methods for Screening the Binding of Ligands to Proteins â€" Identification and Characterization of Bioactive Ligands. , 2002, , 287-315.		3
67	Epitope mapping of the O-chain polysaccharide of Legionella pneumophila serogroup 1 lipopolysaccharide â€˜by saturation-transfer-difference NMR spectroscopy. FEBS Journal, 2002, 269, 573-582.	0.2	34
68	Molecular Recognition of Sialyl Lewisx and Related Saccharides by Two Lectins. Journal of the American Chemical Society, 2001, 123, 10705-10714.	13.7	106
69	Molecular Recognition of UDP-Gal by Î²-1,4-Galactosyltransferase T1. Angewandte Chemie - International Edition, 2001, 40, 4189-4192.	13.8	35
70	Deuterated Disaccharides for the Investigation of Protein-Carbohydrate Interactions-Application of Bioaffinity-and STD-NMR. Journal of Carbohydrate Chemistry, 2000, 19, 769-782.	1.1	4
71	Application of 3D-TOCSY-trNOESY for the Assignment of Bioactive Ligands from Mixtures. Angewandte Chemie - International Edition, 2000, 39, 2097-2099.	13.8	17
72	Application of NMR Based Binding Assays to Identify Key Hydroxy Groups for Intermolecular Recognition. Journal of the American Chemical Society, 2000, 122, 6093-6099.	13.7	108

#	Article	IF	Citations
73	Mapping the Binding of Synthetic Disaccharides Representing Epitopes of Chlamydial Lipopolysaccharide to Antibodies with NMR. Biochemistry, 2000, 39, 12778-12788.	2.5	60
74	NMR Experiments Reveal Distinct Antibody-Bound Conformations of a Synthetic Disaccharide Representing a General Structural Element of Bacterial Lipopolysaccharide Epitopes. Biochemistry, 1999, 38, 6449-6459.	2.5	47
75	Bioaffinity NMR Spectroscopy: Identification of an E-Selectin Antagonist in a Substance Mixture by Transfer NOE. Angewandte Chemie - International Edition, 1999, 38, 98-102.	13.8	67
76	Conformational analysis of a Chlamydia-specific disaccharide alpha-Kdo-(2-->8)-alpha-Kdo-(2-->O)-allyl in aqueous solution and bound to a monoclonal antibody: observation of intermolecular transfer NOEs. Journal of Biomolecular NMR, 1998, 12, 123-133.	2.8	20
77	Conformational Analysis of a Complex Between Dolichos biflorus Lectin and the Forssman Pentasaccharide Using Transferred NOE Build-Up Curves. Journal of Carbohydrate Chemistry, 1998, 17, 217-230.	1.1	6
78	Transferred Nuclear Overhauser Enhancement (NOE) and Rotating-Frame NOE Experiments Reflect the Size of the Bound Segment of the Forssman Pentasaccharide in the Binding Site of Dolichos Biflorus Lectin. FEBS Journal, 1997, 244, 242-250.	0.2	19
79	Screening Mixtures for Biological Activity by NMR. FEBS Journal, 1997, 246, 705-709.	0.2	154
80	Combined NMR, grid search/MM3 and Metropolis Monte Carlo/GEGOP studies of two l-fucose containing disaccharides: Î±-l-Fuc-(1,4)-Î²-d-GlcNAc-OMe and Î±-l-Fuc-(1,6)-Î²-d-GlcNAc-OMe. Computational and Theoretical Chemistry, 1997, 395-396, 297-311.	1.5	7
81	Application of homonuclear 3D NMR experiments and 1D analogs to study the conformation of sialyl Lewis(x) bound to E-selectin. Journal of Biomolecular NMR, 1997, 9, 423-436.	2.8	32
82	Conformational analysis of biantennary glycans and molecular modeling of their complexes with lentil lectin. Journal of Molecular Graphics and Modelling, 1997, 15, 37-42.	2.4	8
83	Structure and dynamics of oligosaccharides: NMR and modeling studies. Current Opinion in Structural Biology, 1996, 6, 710-720.	5.7	143
84	Conformational Analysis of Blood Group A Trisaccharide in Solution and in the Binding Site of Dolichos biflorus Lectin Using Transient and Transferred Nuclear Overhauser Enhancement (NOE) and Rotating-Frame NOE Experiments. FEBS Journal, 1996, 239, 710-719.	0.2	37
85	Determination of the Bioactive Conformation of the Carbohydrate Ligand in the E-Selectin/Sialyl LewisX Complex. Angewandte Chemie International Edition in English, 1995, 34, 1841-1844.	4.4	112
86	Assessing glycosidic linkage flexibility: Conformational analysis of the repeating trisaccharide unit of Aeromonas salmonicida. Journal of Biomolecular NMR, 1994, 4, 97-116.	2.8	27
87	Aleuria aurantia Agglutinin Recognizes Multiple Conformations of ?-L-Fuc-(1?6)-?-D-GlcNAc-OMe. Angewandte Chemie International Edition in English, 1994, 33, 88-91.	4.4	42
88	A Monte Carlo method for conformational analysis of saccharides. Carbohydrate Research, 1993, 238, 49-73.	2.3	126
89	Conformational analysis of ?-d-Fuc-(1?4)-?-d-GlcNAc-OMe. One-dimensional transient NOE experiments and metropolis Monte Carlo simulations. Journal of Biomolecular NMR, 1993, 3, 399-414.	2.8	23
90	Synthesis and conformational and NMR studies of Î±-d-mannopyranosyl and Î±-d-mannopyranosyl-(1 â†') Tj ETQq0 0 0 rgBT /Overlock 10	2.3	25

#	Article	IF	Citations
91	Synthesis and conformational analysis of methyl 2â€Oâ€(Î±â€Dâ€Mannopyranosyl)â€Î±â€Dâ€mannopyranoside. Liebigs Annalen Der Chemie, 1991, 1991, 135-141.	0.8	36
92	Improved synthesis of Î±â€Lâ€Fuc(1â†'4)â€Î²â€Dâ€GlcNAc and Î±â€Lâ€Fuc(1â†'6)â€Î²â€Dâ€GlcNAc building blocks: A convergent strat employing 4â€Oâ†'6â€O acetyl migration; NOE data of the protected Î±â€1,4â€linked disaccharide. Liebigs Annalen Der Chemie, 1991, 1991, 237-242.	0.8	13
93	Conformational analysis of a disaccharide fragment of the polysaccharide antigen of Streptococcus pneumoniae type 1 using n.m.r. spectroscopy and HSEA calculations. Carbohydrate Research, 1990, 198, 375-380.	2.3	34
94	Conformational analysis of key disaccharide components of Brucella A and M antigens. Canadian Journal of Chemistry, 1990, 68, 979-988.	1.1	54
95	Block synthesis of two pentasaccharide determinants of the Brucella M antigen using thioglycoside methodologies. Canadian Journal of Chemistry, 1989, 67, 497-502.	1.1	34
96	Synthetic antigenic determinants of the Brucella A polysaccharide: A disaccharide thioglycoside for block synthesis of pentasaccharide and lower homologues of Î±1,2-linked 4,6-dideoxy-4-formamido-Î±-D-mannose. Canadian Journal of Chemistry, 1989, 67, 491-496.	1.1	35
97	Definition of Brucella A and M epitopes by monoclonal typing reagents and synthetic oligosaccharides. Infection and Immunity, 1989, 57, 2829-2836.	2.2	98
98	Synthesis of antigenic determinants of the Brucella a antigen, utilizing methyl 4-azido-4,6-dideoxy-Î±-d-mannopyranoside efficiently derived from d-mannose. Carbohydrate Research, 1988, 174, 239-251.	2.3	71
99	Synthesis of 4,6-dideoxy-4-formamido-Î±-D-mannose containing tri-, tetra-, and penta-saccharides, antigenic determinants of the Brucella A and M antigens. Journal of the Chemical Society Chemical Communications, 1987, , 1648-1650.	2.0	5
100	Konformationsanalyse, XXV. Konformationen von Octasaccharidâ€•und Pentasaccharidâ€Sequenzen in Nâ€Glycoproteinen des Lactosaminâ€Typs. Liebigs Annalen Der Chemie, 1985, 1985, 489-509.	0.8	37
101	Konformationsanalyse, XXIV. Bestimmung der Konformationen von Triâ€•und Tetrasaccharidâ€Sequenzen der Coreâ€Struktur von Nâ€Glycoproteinen. Problem der (1 â†' 6)â€glycosidischen Bindung. Liebigs Annalen Der Chemie, 1984, 1984, 951-976.	0.8	49
102	The Unique Solution Structure and Immunochemistry of the Candida albicansÂΪ1, 2-Mannopyranan Cell Wall Antigen. , 0, , 145-187.		1
103	NMR Experiments for Large Carbohydrates. , 0, , 95-108.		0
104	NMR of Carbohydrates: 1D Homonuclear Selective Methods. , 0, , 59-93.		17
105	NMR of Sulfated Oligo- and Polysaccharides. , 0, , 189-229.		7
106	NMR Analysis of Carbohydrate â€“ Carbohydrate Interactions. , 0, , 273-288.		0
107	Combining NMR and Simulation Methods in Oligosaccharide Conformational Analysis. , 0, , 109-144.		2
108	Relaxation and Dynamics. , 0, , 1-21.		0

#	Article	IF	Citations
109	Residual Dipolar Couplings: Structure and Dynamics of Glycolipids. , 0, , 231-245.		0
110	Detection of Hydroxyl Protons. , 0, , 39-57.		1
111	Front Matter and Subject Index. , 0, , i-xv.		0
112	Activated Sugars. , 0, , 247-271.		0
113	Residual Dipolar Couplings in Bacterial Polysaccharides. , 0, , 23-38.		0