# J H Prestegard

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/11981935/publications.pdf

Version: 2024-02-01

| | | | |
|---|---|---|---|
| 96<br>papers | 8,268<br>citations | 41258<br>49<br>h-index | 46693<br>89<br>g-index |
| 102<br>all docs | 102<br>docs citations | 102<br>times ranked | 3316<br>citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Direct NOE simulation from long MD trajectories. Journal of Magnetic Resonance, 2016, 265, 1-9. | 1.2 | 20 |
| 2 | Distance mapping of protein-binding sites using spin-labeled oligosaccharide ligands. Protein Science, 2008, 10, 2393-2400. | 3.1 | 49 |
| 3 | Domainâ€“domain motions in proteins from time-modulated pseudocontact shifts. Journal of Biomolecular NMR, 2007, 39, 53-61. | 1.6 | 30 |
| 4 | Structural Monitoring of Oligosaccharides through 13C Enrichment and NMR Observation of Acetyl Groups. Biophysical Journal, 2006, 91, 1952-1959. | 0.2 | 18 |
| 5 | Structure determination of a new protein from backbone-centered NMR data and NMR-assisted structure prediction. Proteins: Structure, Function and Bioinformatics, 2006, 65, 480-489. | 1.5 | 7 |
| 6 | Backbone solution structures of proteins using residual dipolar couplings: Application to a novel structural genomics target. Journal of Structural and Functional Genomics, 2005, 5, 241-254. | 1.2 | 22 |
| 7 | Determination of Protein Backbone Structures from Residual Dipolar Couplings. Methods in Enzymology, 2005, 394, 175-209. | 0.4 | 64 |
| 8 | Backbone solution structures of proteins using residual dipolar couplings: application to a novel structural genomics target. Journal of Structural and Functional Genomics, 2004, 5, 241-254. | 1.2 | 23 |
| 9 | Residual Dipolar Couplings in Structure Determination of Biomolecules. ChemInform, 2004, 35, no. | 0.1 | 0 |
| 10 | Residual Dipolar Couplings in Structure Determination of Biomolecules. Chemical Reviews, 2004, 104, 3519-3540. | 23.0 | 387 |
| 11 | Conformational Differences in Liganded and Unliganded States of Galectin-3. Biochemistry, 2003, 42, 3688-3695. | 1.2 | 49 |
| 12 | Rapid classification of a protein fold family using a statistical analysis of dipolar couplings. Bioinformatics, 2003, 19, 1549-1555. | 1.8 | 38 |
| 13 | High Resolution NMR of Biomolecules. Lecture Notes in Physics, 2002, , 426-434. | 0.3 | 3 |
| 14 | Conformational Analysis of a Flexible Oligosaccharide Using Residual Dipolar Couplings. Journal of the American Chemical Society, 2001, 123, 485-492. | 6.6 | 125 |
| 15 | Nuclear Magnetic Resonance in the Era of Structural Genomics. Biochemistry, 2001, 40, 8677-8685. | 1.2 | 69 |
| 16 | Structural Basis for Thermostability in Aporubredoxins fromPyrococcus furiosusandClostridium pasteurianumâ€. Biochemistry, 2001, 40, 7279-7290. | 1.2 | 41 |
| 17 | Structural and Dynamic Analysis of Residual Dipolar Coupling Data for Proteins. Journal of the American Chemical Society, 2001, 123, 1416-1424. | 6.6 | 277 |
| 18 | A Dipolar Coupling Based Strategy for Simultaneous Resonance Assignment and Structure Determination of Protein Backbones. Journal of the American Chemical Society, 2001, 123, 11791-11796. | 6.6 | 119 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Partial alignment of biomolecules: an aid to NMR characterization. Current Opinion in Chemical Biology, 2001, 5, 584-590. | 2.8 | 94 |
| 20 | NMR structures of biomolecules using field oriented media and residual dipolar couplings. Quarterly Reviews of Biophysics, 2000, 33, 371-424. | 2.4 | 400 |
| 21 | Molecular Symmetry as an Aid to Geometry Determination in Ligand Protein Complexes. Journal of Magnetic Resonance, 2000, 142, 153-158. | 1.2 | 65 |
| 22 | Variation of Molecular Alignment as a Means of Resolving Orientational Ambiguities in Protein Structures from Dipolar Couplings. Journal of Magnetic Resonance, 2000, 143, 402-406. | 1.2 | 159 |
| 23 | Direct measurement of 1H-1H dipolar couplings in proteins: a complement to traditional NOE measurements. Journal of Biomolecular NMR, 2000, 18, 23-31. | 1.6 | 33 |
| 24 | Rapid determination of protein folds using residual dipolar couplings. Journal of Molecular Biology, 2000, 304, 447-460. | 2.0 | 106 |
| 25 | Solution Conformations of a Trimannoside from Nuclear Magnetic Resonance and Molecular Dynamics Simulations. Biophysical Journal, 2000, 79, 3313-3329. | 0.2 | 43 |
| 26 | Nuclear Magnetic Resonance Studies of the N-Terminal Fragment of Adenosine Diphosphate Ribosylation Factor 1 in Micelles and Bicelles:â€‰ Influence of N-Myristoylation. Biochemistry, 2000, 39, 3804-3816. | 1.2 | 34 |
| 27 | Sign determination of dipolar couplings in field-oriented bicelles by variable angle sample spinning (VASS). Journal of Biomolecular NMR, 1999, 15, 145-150. | 1.6 | 40 |
| 28 | Order Matrix Analysis of Residual Dipolar Couplings Using Singular Value Decomposition. Journal of Magnetic Resonance, 1999, 138, 334-342. | 1.2 | 544 |
| 29 | Domain Orientation and Dynamics in Multidomain Proteins from Residual Dipolar Couplings. Biochemistry, 1999, 38, 9013-9022. | 1.2 | 244 |
| 30 | Intensity-Based Measurement of Homonuclear Residual Dipolar Couplings from CT-COSY. Journal of the American Chemical Society, 1999, 121, 7712-7713. | 6.6 | 65 |
| 31 | Residual dipolar coupling derived orientational constraints on ligand geometry in a 53 kDa protein-ligand complex. Journal of Molecular Biology, 1999, 293, 107-115. | 2.0 | 89 |
| 32 | The influence of Câ€terminal extension on the structure of the â€œJâ€domainâ€in E. coli DnaJ. Protein Science, 1999, 8, 203-214. | 3.1 | 39 |
| 33 | Hydrogen bonding geometry of a protein-bound carbohydrate from water exchange-mediated cross-relaxation. Journal of Biomolecular NMR, 1998, 12, 209-222. | 1.6 | 11 |
| 34 | Improved dilute bicelle solutions for high-resolution NMR of biological macromolecules. , 1998, 12, 447-451. | | 195 |
| 35 | New techniques in structural NMR â€" anisotropic interactions. Nature Structural Biology, 1998, 5, 517-522. | 9.7 | 221 |
| 36 | A Metropolis Monte Carlo Implementation of Bayesian Time-Domain Parameter Estimation: Application to Coupling Constant Estimation from Antiphase Multiplets. Journal of Magnetic Resonance, 1998, 130, 217-232. | 1.2 | 32 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Nuclear Magnetic Resonance Characterization of the Myristoylated, N-Terminal Fragment of ADP-Ribosylation Factor 1 in a Magnetically Oriented Membrane Arrayâ€. Biochemistry, 1998, 37, 706-716. | 1.2 | 105 |
| 38 | COSY Cross-Peaks from 1Hâ^'1H Dipolar Couplings in NMR Spectra of Field Oriented Oligosaccharides. Journal of the American Chemical Society, 1998, 120, 9366-9367. | 6.6 | 58 |
| 39 | Nuclear Magnetic Resonance Structural and Ligand Binding Studies of BLBC, a Two-Domain Fragment of Barley Lectinâ€. Biochemistry, 1998, 37, 116-128. | 1.2 | 23 |
| 40 | NMR evidence for slow collective motions in cyanometmyoglobin. Nature Structural Biology, 1997, 4, 292-297. | 9.7 | 274 |
| 41 | Performance of a neural-network-based determination of amino acid class and secondary structure from 1H-15N NMR data. Journal of Biomolecular NMR, 1997, 10, 45-52. | 1.6 | 20 |
| 42 | Quantitation of chemical exchange rates using pulsed-field-gradient diffusion measurements. Journal of Biomolecular NMR, 1997, 9, 136-150. | 1.6 | 20 |
| 43 | Electron Spinâ€“Nuclear Spin Cross-Correlation Effects on Multiplet Splittings in Paramagnetic Proteins. Journal of Magnetic Resonance, 1997, 128, 138-143. | 1.2 | 59 |
| 44 | Conformation of sulfoquinovosyldiacylglycerol bound to a magnetically oriented membrane system. Biophysical Journal, 1996, 71, 2573-2582. | 0.2 | 14 |
| 45 | NMR investigations of the structural properties of the nodulation protein, NodF, fromRhizobium leguminosarumand its homology withEscherichia coliacyl carrier protein. FEBS Letters, 1996, 388, 66-72. | 1.3 | 22 |
| 46 | A QuantitativeJ-Correlation Experiment for the Accurate Measurement of One-Bond Amide15Nâ€“1H Couplings in Proteins. Journal of Magnetic Resonance Series B, 1996, 112, 245-252. | 1.6 | 72 |
| 47 | Measurement of Amide15Nâ€“1H One-Bond Couplings in Proteins Using Accordion Heteronuclear-Shift-Correlation Experiments. Journal of Magnetic Resonance Series B, 1996, 112, 269-274. | 1.6 | 61 |
| 48 | Nuclear magnetic dipole interactions in field-oriented proteins: information for structure determination in solution.. Proceedings of the National Academy of Sciences of the United States of America, 1995, 92, 9279-9283. | 3.3 | 824 |
| 49 | 1H and 15N Magnetic Resonance Assignments, Secondary Structure, and Tertiary Fold of Escherichia coli DnaJ(1-78). Biochemistry, 1995, 34, 5587-5596. | 1.2 | 75 |
| 50 | Overexpression, Purification, and Characterization of Escherichia coli Acyl Carrier Protein and 2 Mutant Proteins. Protein Expression and Purification, 1995, 6, 394-400. | 0.6 | 35 |
| 51 | Small angle x-ray scattering studies of magnetically oriented lipid bilayers. Biophysical Journal, 1995, 69, 1891-1896. | 0.2 | 40 |
| 52 | Amide exchange rates in Escherichia coli acyl carrier protein: Correlation with protein structure and dynamics. Protein Science, 1995, 4, 983-993. | 3.1 | 55 |
| 53 | Application of neural networks to automated assignment of NMR spectra of proteins. Journal of Biomolecular NMR, 1994, 4, 35-46. | 1.6 | 55 |
| 54 | Kinetics and thermodynamics of thermal denaturation in acyl carrier protein. Protein Science, 1994, 3, 103-108. | 3.1 | 20 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | 13C NMR Studies of Wheat Germ Agglutinin Interactions with N-Acetylglucosamine at a Magnetically Oriented Bilayer Surface. Biochemistry, 1994, 33, 10137-10148. | 1.2 | 24 |
| 56 | Synthesis and characterization of a 13C-labeled Î±-mannosyl glycolipid analog from [13C]glucose. Chemistry and Physics of Lipids, 1993, 66, 155-158. | 1.5 | 4 |
| 57 | Structure and dynamics of sialic acid at the surface of a magnetically oriented membrane system. Biochemistry, 1993, 32, 3422-3428. | 1.2 | 40 |
| 58 | Structure and dynamics of the sialic acid moiety of GM3-ganglioside at the surface of a magnetically oriented membrane. Biochemistry, 1993, 32, 13405-13413. | 1.2 | 35 |
| 59 | Torsion angle analysis of glycolipid order at membrane surfaces. Biophysical Journal, 1993, 64, 392-398. | 0.2 | 16 |
| 60 | Orientational behavior of phosphatidylcholine bilayers in the presence of aromatic amphiphiles and a magnetic field. Biophysical Journal, 1993, 64, 1069-1080. | 0.2 | 48 |
| 61 | Characterization of field-ordered aqueous liquid crystals by NMR diffusion measurements. The Journal of Physical Chemistry, 1993, 97, 9837-9843. | 2.9 | 40 |
| 62 | Structural Interpretation of NMR Data in the Presence of Motion. , 1991, , 269-277. | | 2 |
| 63 | Refinement of the NMR structures for acyl carrier protein with scalar coupling data. Proteins: Structure, Function and Bioinformatics, 1990, 8, 377-385. | 1.5 | 163 |
| 64 | NMR and computational studies of interactions between remote residues in gangliosides. Biochemistry, 1990, 29, 9843-9855. | 1.2 | 85 |
| 65 | Magnetically orientable phospholipid bilayers containing small amounts of a bile salt analogue, CHAPSO. Biophysical Journal, 1990, 58, 447-460. | 0.2 | 219 |
| 66 | Motional effects on NMR structural data. Biochemical Pharmacology, 1990, 40, 7-13. | 2.0 | 21 |
| 67 | A dynamic model for the structure of acyl carrier protein in solution. Biochemistry, 1989, 28, 8792-8797. | 1.2 | 133 |
| 68 | Orientational analysis of micelle-associated trehalose using an NMR-pseudoenergy approach. Journal of the American Chemical Society, 1989, 111, 3176-3182. | 6.6 | 27 |
| 69 | High Resolution Proton NMR Studies of Gangliosides. Journal of Biological Chemistry, 1989, 264, 3478-3483. | 1.6 | 65 |
| 70 | Three-dimensional structure of acyl carrier protein in solution determined by nuclear magnetic resonance and the combined use of dynamical simulated annealing and distance geometry. FEBS Journal, 1988, 175, 9-15. | 0.2 | 82 |
| 71 | A molecular mechanics-NMR pseudoenergy approach to the solution conformation of glycolipids. Journal of Computational Chemistry, 1988, 9, 133-147. | 1.5 | 37 |
| 72 | Three-dimensional structure of acyl carrier protein determined by NMR pseudoenergy and distance geometry calculations. Biochemistry, 1988, 27, 6135-6142. | 1.2 | 109 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Magnetic field induced ordering of bile salt/phospholipid micelles: new media for NMR structural investigations. Biochimica Et Biophysica Acta - Biomembranes, 1988, 940, 289-294. | 1.4 | 129 |
| 74 | Protein dynamics and distance determination by NOE measurements. FEBS Letters, 1988, 236, 71-76. | 1.3 | 63 |
| 75 | Analysis of Complex Carbohydrate Primary and Secondary Structure via Two-Dimensional Proton Nuclear Magnetic Resonance Spectroscopy. Advances in Experimental Medicine and Biology, 1988, 228, 759-784. | 0.8 | 3 |
| 76 | [4] Oligosaccharide structure by two-dimensional proton nuclear magnetic resonance spectroscopy. Methods in Enzymology, 1987, 138, 38-59. | 0.4 | 58 |
| 77 | Methyl group dynamics from relaxation of double quantum filtered NMR signals. Application to deoxycholate. Journal of the American Chemical Society, 1987, 109, 3829-3835. | 6.6 | 66 |
| 78 | NMR: pseudoenergy approach to the solution structure of acyl carrier protein. Biochemistry, 1987, 26, 4652-4660. | 1.2 | 37 |
| 79 | Structural comparison of acyl carrier protein in acylated and sulfhydryl forms by two-dimensional proton NMR spectroscopy. Biochemistry, 1987, 26, 3493-3500. | 1.2 | 27 |
| 80 | [19F]-1H heteronuclear nuclear Overhauser effect studies of the acyl chain-binding site of acyl carrier protein. Journal of Biological Chemistry, 1987, 262, 8963-5. | 1.6 | 27 |
| 81 | Purification and NMR characterization of acyl carrier protein. Journal of Biological Chemistry, 1987, 262, 3685-9. | 1.6 | 4 |
| 82 | Secondary structure of acyl carrier protein as derived from two-dimensional proton NMR spectroscopy. Biochemistry, 1986, 25, 5766-5774. | 1.2 | 49 |
| 83 | Structural analysis of a glycolipid head group with one- and two-state NMR pseudoenergy approaches. Journal of the American Chemical Society, 1986, 108, 6778-6784. | 6.6 | 55 |
| 84 | Elucidation of glycolipid structure by proton nuclear magnetic resonance spectroscopy. Chemistry and Physics of Lipids, 1986, 42, 27-48. | 1.5 | 56 |
| 85 | High-Resolution Proton NMR Studies of Gangliosides. III. Elucidation of the Structure of Ganglioside GM3 Lactone12. Journal of Biochemistry, 1985, 98, 1367-1373. | 0.9 | 66 |
| 86 | Recent Advances in Structural Analysis of Gangliosides: Primary and Secondary Structures. Advances in Experimental Medicine and Biology, 1984, 174, 87-102. | 0.8 | 13 |
| 87 | High-resolution proton NMR studies of gangliosides. 2. Use of two-dimensional nuclear Overhauser effect spectroscopy and sialylation shifts for determination of oligosaccharide sequence and linkage sites. Biochemistry, 1983, 22, 2687-2690. | 1.2 | 48 |
| 88 | High-resolution proton NMR studies of gangliosides. 1. Use of homonuclear two-dimensional spin-echo J-correlated spectroscopy for determination of residue composition and anomeric configurations. Biochemistry, 1983, 22, 2676-2687. | 1.2 | 239 |
| 89 | Nuclear magnetic resonance study of acetic acid permeation of large unilamellar vesicle membranes. Biophysical Journal, 1979, 28, 1-13. | 0.2 | 67 |
| 90 | Nuclear magnetic resonance determinations of permeation coefficients for maleic acid in phospholipid vesicles. Biophysical Journal, 1979, 26, 575-584. | 0.2 | 21 |

| # | Article | IF | Citations |
|---|---|---|---|
| 91 | NMR studies of pH-induced transport of carboxylic acids across phospholipid vesicle membranes. Biochemical and Biophysical Research Communications, 1977, 75, 295-301. | 1.0 | 61 |
| 92 | Carbon-13 Fourier transform nuclear magnetic resonance. VIII. Role of steric and electric field effects in fatty acid spectra. Journal of Organic Chemistry, 1974, 39, 1698-1705. | 1.7 | 166 |
| 93 | Comparison of 13C spin-lattice relaxation times in phospholipid vesicles and multilayers. Biochemical and Biophysical Research Communications, 1974, 58, 549-555. | 1.0 | 22 |
| 94 | Electric field effects in the carbon-13 nuclear magnetic resonance spectra of unsaturated fatty acids. Potential tool for conformational analysis. Journal of the American Chemical Society, 1973, 95, 6358-6364. | 6.6 | 108 |
| 95 | Conformational analysis of lecithin in vesicles by 13C NMR. Biochemical and Biophysical Research Communications, 1972, 48, 70-75. | 1.0 | 65 |
| 96 | Proton magnetic resonance studies of the cation-binding properties of nonactin. II. Comparison of the sodium ion, potassium ion, and cesium ion complexes. Journal of the American Chemical Society, 1970, 92, 4440-4446. | 6.6 | 81 |