

# Gottfried Otting

## List of Publications by Year in descending order

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301  
papers

20,698  
citations

9786

73  
h-index

13379

130  
g-index

484  
all docs

484  
docs citations

484  
times ranked

12909  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Clean TOCSY for proton spin system identification in macromolecules. Journal of the American Chemical Society, 1988, 110, 7870-7872.   | 13.7 | 1,191     |
| 2  | Protein hydration in aqueous solution. Science, 1991, 254, 974-980.  | 12.6 | 795       |
| 3  | Homeodomain-DNA recognition. Cell, 1994, 78, 211-223.  | 28.9 | 770       |
| 4  | Alignment of Biological Macromolecules in Novel Nonionic Liquid Crystalline Media for NMR Experiments. Journal of the American Chemical Society, 2000, 122, 7793-7797.   | 13.7 | 600       |
| 5  | Stereospecific nuclear magnetic resonance assignments of the methyl groups of valine and leucine in the DNA-binding domain of the 434 repressor by biosynthetically directed fractional carbon-13 labeling. Biochemistry, 1989, 28, 7510-7516.                 | 2.5  | 597       |
| 6  | The structure of the Antennapedia homeodomain determined by NMR spectroscopy in solution: Comparison with prokaryotic repressors. Cell, 1989, 59, 573-580.   | 28.9 | 513       |
| 7  | Protein NMR Using Paramagnetic Ions. Annual Review of Biophysics, 2010, 39, 387-405.   | 10.0 | 354       |
| 8  | Heteronuclear filters in two-dimensional [ <sup>1</sup> H, <sup>1</sup> H]-NMR spectroscopy: combined use with isotope labelling for studies of macromolecular conformation and intermolecular interactions. Quarterly Reviews of Biophysics, 1990, 23, 39-96. | 5.7  | 350       |
| 9  | Proton exchange rates from amino acid side chains—implications for image contrast. Magnetic Resonance in Medicine, 1996, 35, 30-42.  | 3.0  | 309       |
| 10 | Studies of protein hydration in aqueous solution by direct NMR observation of individual protein-bound water molecules. Journal of the American Chemical Society, 1989, 111, 1871-1875.  | 13.7 | 308       |
| 11 | Determination of the Nuclear Magnetic Resonance Solution Structure of an Antennapedia Homeodomain-DNA Complex. Journal of Molecular Biology, 1993, 234, 1084-1097.   | 4.2  | 278       |
| 12 | NMR structure of the death domain of the p75 neurotrophin receptor. EMBO Journal, 1997, 16, 4999-5005.   | 7.8  | 269       |
| 13 | NMR Structure Determination of Protein-Ligand Complexes by Lanthanide Labeling. Accounts of Chemical Research, 2007, 40, 206-212.  | 15.6 | 267       |
| 14 | Hydration of Proteins. Journal of Molecular Biology, 1993, 231, 1040-1048.   | 4.2  | 235       |
| 15 | The structure of the homeodomain and its functional implications. Trends in Genetics, 1990, 6, 323-329.  | 6.7  | 229       |
| 16 | NMR observation of individual molecules of hydration water bound to DNA duplexes: direct evidence for a spine of hydration water present in aqueous solution. Nucleic Acids Research, 1992, 20, 6549-6553.   | 14.5 | 221       |
| 17 | Dynamics of Protein and Peptide Hydration. Journal of the American Chemical Society, 2004, 126, 102-114.   | 13.7 | 215       |
| 18 | Sapoin fold revealed by the NMR structure of NK-lysin. Nature Structural Biology, 1997, 4, 793-795.  | 9.7  | 214       |

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|----|--|------|-----------|
| 19 | NMR studies of water bound to biological molecules. Progress in Nuclear Magnetic Resonance Spectroscopy, 1997, 31, 259-285.  | 7.5  | 204       |
| 20 | Identification of Protein Surfaces by NMR Measurements with a Paramagnetic Gd(III) Chelate. Journal of the American Chemical Society, 2002, 124, 372-373.  | 13.7 | 201       |
| 21 | Disulfide bond isomerization in BPTI and BPTI(G36S): An NMR study of correlated mobility in proteins. Biochemistry, 1993, 32, 3571-3582.   | 2.5  | 173       |
| 22 | Prospects for lanthanides in structural biology by NMR. Journal of Biomolecular NMR, 2008, 42, 1-9.  | 2.8  | 172       |
| 23 | Nubat: an interactive software tool for fitting $\hat{\Gamma}^{\mu\nu}$ -tensors to molecular coordinates using pseudocontact shifts. Journal of Biomolecular NMR, 2008, 41, 179-189.  | 2.8  | 168       |
| 24 | Paramagnetic labelling of proteins and oligonucleotides for NMR. Journal of Biomolecular NMR, 2010, 46, 101-112.   | 2.8  | 157       |
| 25 | Origin of $\hat{\Gamma}_{\parallel,2}$ and $\hat{\Gamma}_{\perp,2}$ ridges in 2D NMR spectra and procedures for suppression. Journal of Magnetic Resonance, 1986, 66, 187-193.   | 0.5  | 152       |
| 26 | The Death-domain Fold of the ASC PYRIN Domain, Presenting a Basis for PYRIN/PYRIN Recognition. Journal of Molecular Biology, 2003, 332, 1155-1163.   | 4.2  | 143       |
| 27 | Nanometer-Scale Distance Measurements in Proteins Using Gd <sup>3+</sup> Spin Labeling. Journal of the American Chemical Society, 2010, 132, 9040-9048.  | 13.7 | 143       |
| 28 | Main protease mutants of SARS-CoV-2 variants remain susceptible to nirmatrelvir. Bioorganic and Medicinal Chemistry Letters, 2022, 62, 128629.   | 2.2  | 131       |
| 29 | Structure determination of the Antp(C39 $\hat{\Gamma}$ S) homeodomain from nuclear magnetic resonance data in solution using a novel strategy for the structure calculation with the programs DIANA, CALIBA, HABAS and GLOMSA. Journal of Molecular Biology, 1991, 217, 531-540. | 4.2  | 130       |
| 30 | Lanthanide Labeling Offers Fast NMR Approach to 3D Structure Determinations of Protein-Protein Complexes. Journal of the American Chemical Society, 2006, 128, 3696-3702.  | 13.7 | 125       |
| 31 | Pseudocontact shifts in biomolecular NMR using paramagnetic metal tags. Progress in Nuclear Magnetic Resonance Spectroscopy, 2017, 98-99, 20-49.   | 7.5  | 125       |
| 32 | Determination of the three-dimensional structure of the Antennapedia homeodomain from Drosophila in solution by <sup>1</sup> H nuclear magnetic resonance spectroscopy. Journal of Molecular Biology, 1990, 214, 183-197.  | 4.2  | 122       |
| 33 | NMR structure of Escherichia coli glutaredoxin 3-glutathione mixed disulfide complex: implications for the enzymatic mechanism 1 Edited by P. E. Wright. Journal of Molecular Biology, 1999, 286, 541-552.   | 4.2  | 121       |
| 34 | Binding of Low Molecular Weight Inhibitors Promotes Large Conformational Changes in the Dengue Virus NS2B-NS3 Protease: Fold Analysis by Pseudocontact Shifts. Journal of the American Chemical Society, 2011, 133, 19205-19215.   | 13.7 | 119       |
| 35 | NMR spectroscopy of hydroxyl protons in aqueous solutions of peptides and proteins. Journal of Biomolecular NMR, 1992, 2, 447-465.   | 2.8  | 117       |
| 36 | A Dipicolinic Acid Tag for Rigid Lanthanide Tagging of Proteins and Paramagnetic NMR Spectroscopy. Journal of the American Chemical Society, 2008, 130, 10486-10487.   | 13.7 | 117       |

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|----|--|------|-----------|
| 37 | Solvent suppression using a spin lock in 2D and 3D NMR spectroscopy with H <sub>2</sub> O solutions. <i>Journal of Magnetic Resonance</i> , 1989, 85, 608-613.   | 0.5  | 115       |
| 38 | Solution structure of the DNA-binding domain and model for the complex of multifunctional hexameric arginine repressor with DNA. <i>Nature Structural Biology</i> , 1997, 4, 819-826.                            | 9.7  | 115       |
| 39 | Protein Hydration Viewed by High-Resolution NMR Spectroscopy: Implications for Magnetic Resonance Image Contrast. <i>Accounts of Chemical Research</i> , 1995, 28, 171-177.                                      | 15.6 | 114       |
| 40 | Protein hydration studied with homonuclear 3D <sup>1</sup> H NMR experiments. <i>Journal of Biomolecular NMR</i> , 1991, 1, 209-215.   | 2.8  | 113       |
| 41 | Precise vicinal coupling constants $^3J_{\text{HNH}}$ in proteins from nonlinear fits of J-modulated [ <sup>15</sup> N, <sup>1</sup> H]-COSY experiments. <i>Journal of Biomolecular NMR</i> , 1992, 2, 257-274. | 2.8  | 112       |
| 42 | Organic solvents identify specific ligand binding sites on protein surfaces. <i>Nature Biotechnology</i> , 1997, 15, 264-268.  | 17.5 | 108       |
| 43 | Spin-state selection filters for the measurement of heteronuclear one-bond coupling constants. <i>Journal of Biomolecular NMR</i> , 1998, 12, 435-441.   | 2.8  | 107       |
| 44 | Proton exchange with internal water molecules in the protein BPTI in aqueous solution. <i>Journal of the American Chemical Society</i> , 1991, 113, 4363-4364.   | 13.7 | 106       |
| 45 | Hydrophobic Interactions in a Cyanobacterial Plastocyanin-Cytochrome f Complex. <i>Journal of the American Chemical Society</i> , 2001, 123, 10444-10453.  | 13.7 | 106       |
| 46 | Protein Structure Determination from Pseudocontact Shifts Using ROSETTA. <i>Journal of Molecular Biology</i> , 2012, 416, 668-677.   | 4.2  | 106       |
| 47 | DOTA-Amide Lanthanide Tag for Reliable Generation of Pseudocontact Shifts in Protein NMR Spectra. <i>Bioconjugate Chemistry</i> , 2011, 22, 2118-2125.   | 3.6  | 104       |
| 48 | Gadolinium Tagging for High-Precision Measurements of 6 nm Distances in Protein Assemblies by EPR. <i>Journal of the American Chemical Society</i> , 2011, 133, 10418-10421.                                     | 13.7 | 104       |
| 49 | Molecular electroporation: a unifying concept for the description of membrane pore formation by antibacterial peptides, exemplified with NK-lysins. <i>FEBS Letters</i> , 1999, 462, 155-158.                    | 2.8  | 103       |
| 50 | Structure Determination of Protein-Ligand Complexes by Transferred Paramagnetic Shifts. <i>Journal of the American Chemical Society</i> , 2006, 128, 12910-12916.  | 13.7 | 102       |
| 51 | Specificity of Urea Binding to Proteins. <i>Journal of the American Chemical Society</i> , 1994, 116, 9670-9674.   | 13.7 | 101       |
| 52 | Support of <sup>1</sup> H NMR assignments in proteins by biosynthetically directed fractional <sup>13</sup> C-labeling. <i>Journal of Biomolecular NMR</i> , 1992, 2, 323-334.                                   | 2.8  | 99        |
| 53 | Thioredoxin Fold as Homodimerization Module in the Putative Chaperone ERp29. <i>Structure</i> , 2001, 9, 457-471.  | 3.3  | 97        |
| 54 | Lanthanide-Binding Peptides for NMR Measurements of Residual Dipolar Couplings and Paramagnetic Effects from Multiple Angles. <i>Journal of the American Chemical Society</i> , 2008, 130, 1681-1687.            | 13.7 | 96        |

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|----|---|------|-----------|
| 55 | NMR detection of hydration water in the intermolecular interface of a protein-DNA complex. <i>Journal of the American Chemical Society</i> , 1993, 115, 1189-1190.  | 13.7 | 95        |
| 56 | NMR identification of hydrophobic cavities with low water occupancies in protein structures using small gas molecules. <i>Nature Structural and Molecular Biology</i> , 1997, 4, 396-404.   | 8.2  | 95        |
| 57 | Backbone Assignment of Fully Protonated Solid Proteins by $^1\text{H}$ Detection and Ultrafast Magic-Angle Spinning NMR Spectroscopy. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 10756-10759.                                     | 13.8 | 95        |
| 58 | A fluorescence quenching assay to discriminate between specific and nonspecific inhibitors of dengue virus protease. <i>Analytical Biochemistry</i> , 2009, 395, 195-204.   | 2.4  | 92        |
| 59 | Multiple-Site Labeling of Proteins with Unnatural Amino Acids. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 2243-2246.  | 13.8 | 89        |
| 60 | Optimization of an Escherichia coli system for cell-free synthesis of selectively $^{15}\text{N}$ -labelled proteins for rapid analysis by NMR spectroscopy. <i>FEBS Journal</i> , 2004, 271, 4084-4093.  | 0.2  | 87        |
| 61 | Rapid pulse length determination in high-resolution NMR. <i>Journal of Magnetic Resonance</i> , 2005, 176, 115-119.   | 2.1  | 86        |
| 62 | Mutations in the COCH gene are a frequent cause of autosomal dominant progressive cochleo-vestibular dysfunction, but not of Meniere's disease. <i>European Journal of Human Genetics</i> , 2003, 11, 744-748.                                      | 2.8  | 85        |
| 63 | Fast Structure-Based Assignment of $^{15}\text{N}$ HSQC Spectra of Selectively $^{15}\text{N}$ -Labeled Paramagnetic Proteins. <i>Journal of the American Chemical Society</i> , 2004, 126, 2963-2970.  | 13.7 | 83        |
| 64 | New nuclear magnetic resonance experiment for measurements of the vicinal coupling constants $^3\text{JHN.alpha.}$ in proteins. <i>Journal of the American Chemical Society</i> , 1990, 112, 3663-3665.   | 13.7 | 82        |
| 65 | Site-Specific Labelling of Proteins with a Rigid Lanthanide-Binding Tag. <i>ChemBioChem</i> , 2006, 7, 1599-1604.   | 2.6  | 82        |
| 66 | Lanthanide Tags for Site-Specific Ligation to an Unnatural Amino Acid and Generation of Pseudocontact Shifts in Proteins. <i>Bioconjugate Chemistry</i> , 2013, 24, 260-268.  | 3.6  | 81        |
| 67 | Nuclear Magnetic Resonance Spectroscopy of a DNA Complex with the Uniformly $^{13}\text{C}$ -Labeled Antennapedia Homeodomain and Structure Determination of the DNA-bound Homeodomain. <i>Journal of Molecular Biology</i> , 1993, 234, 1070-1083. | 4.2  | 80        |
| 68 | Water molecules in DNA recognition II: a molecular dynamics view of the structure and hydration of the trp operator 1. Edited by B. Honig. <i>Journal of Molecular Biology</i> , 1998, 282, 859-873.  | 4.2  | 80        |
| 69 | Protein engineering with unnatural amino acids. <i>Current Opinion in Structural Biology</i> , 2013, 23, 581-587.   | 5.7  | 80        |
| 70 | Site-specific Labelling with a Metal Chelator for Protein-structure Refinement. <i>Journal of Biomolecular NMR</i> , 2004, 29, 351-361.   | 2.8  | 78        |
| 71 | Flaviviral Protease Inhibitors Identified by Fragment-Based Library Docking into a Structure Generated by Molecular Dynamics. <i>Journal of Medicinal Chemistry</i> , 2009, 52, 4860-4868.  | 6.4  | 77        |
| 72 | Improving a Natural Enzyme Activity through Incorporation of Unnatural Amino Acids. <i>Journal of the American Chemical Society</i> , 2011, 133, 326-333.   | 13.7 | 77        |

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|----|---|------|-----------|
| 73 | Three-Dimensional Protein Fold Determination from Backbone Amide Pseudocontact Shifts Generated by Lanthanide Tags at Multiple Sites. <i>Structure</i> , 2013, 21, 883-890.   | 3.3  | 77        |
| 74 | Efficient purging scheme for proton-detected heteronuclear two-dimensional NMR. <i>Journal of Magnetic Resonance</i> , 1988, 76, 569-574.   | 0.5  | 76        |
| 75 | NMR Analysis of the Dynamic Exchange of the NS2B Cofactor between Open and Closed Conformations of the West Nile Virus NS2B-NS3 Protease. <i>PLoS Neglected Tropical Diseases</i> , 2009, 3, e561.                                  | 3.0  | 75        |
| 76 | Spectroscopic selection of distance measurements in a protein dimer with mixed nitroxide and Gd <sup>3+</sup> spin labels. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 4355.   | 2.8  | 73        |
| 77 | Nanometer-Range Distance Measurement in a Protein Using Mn <sup>2+</sup> Tags. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 157-160.   | 4.6  | 72        |
| 78 | Memory T Cell RNA Rearrangement Programmed by Heterogeneous Nuclear Ribonucleoprotein hnRNPLL. <i>Immunity</i> , 2008, 29, 863-875.   | 14.3 | 71        |
| 79 | Discovery of a Non-Peptidic Inhibitor of West Nile Virus NS3 Protease by High-Throughput Docking. <i>PLoS Neglected Tropical Diseases</i> , 2009, 3, e356.  | 3.0  | 71        |
| 80 | Experimental NMR techniques for studies of protein-ligand interactions. <i>Current Opinion in Structural Biology</i> , 1993, 3, 760-768.  | 5.7  | 69        |
| 81 | NMR analysis of in vitro-synthesized proteins without purification: a high-throughput approach. <i>FEBS Letters</i> , 2002, 524, 159-162.   | 2.8  | 69        |
| 82 | Cell-Free Transcription/Translation from PCR-Amplified DNA for High-Throughput NMR Studies. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 3356-3358.   | 13.8 | 69        |
| 83 | Protein conformation by EPR spectroscopy using gadolinium tags clicked to genetically encoded p-azido-phenylalanine. <i>Chemical Communications</i> , 2015, 51, 15898-15901.  | 4.1  | 67        |
| 84 | An $\hat{I}^2$ -HSQC- $\hat{I}^2$ Experiment for Spin-State Selective Editing of IS Cross Peaks. <i>Journal of Magnetic Resonance</i> , 1998, 133, 364-367.   | 2.1  | 66        |
| 85 | In Vivo Protein Cyclization Promoted by a Circularly Permuted <i>Synechocystis</i> sp. PCC6803 DnaB Mini-intein. <i>Journal of Biological Chemistry</i> , 2002, 277, 7790-7798.   | 3.4  | 66        |
| 86 | <sup>15</sup> N-Labelled proteins by cell-free protein synthesis.. <i>FEBS Journal</i> , 2006, 273, 4154-4159.  | 4.7  | 66        |
| 87 | Translational incorporation of L-3,4-dihydroxyphenylalanine into proteins. <i>FEBS Journal</i> , 2005, 272, 3162-3171.  | 4.7  | 64        |
| 88 | Hydration of DNA in aqueous solution: NMR evidence for a kinetic destabilization of the minor groove hydration of d-(TTAA) <sub>2</sub> versus d-(AATT) <sub>2</sub> segments. <i>Nucleic Acids Research</i> , 1994, 22, 2249-2254. | 14.5 | 63        |
| 89 | Direct NMR observation of the Cys-14 thiol proton of reduced <i>Escherichia coli</i> glutaredoxin-3 supports the presence of an active site thiol-thiolate hydrogen bond. <i>FEBS Letters</i> , 1999, 449, 196-200.                 | 2.8  | 63        |
| 90 | NMR structure of the N-terminal domain of <i>E. coli</i> DnaB helicase: implications for structure rearrangements in the helicase hexamer. <i>Structure</i> , 1999, 7, 681-690.   | 3.3  | 62        |

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|-----|---|------|-----------|
| 91  | Crystal and Solution Structures of the Helicase-binding Domain of Escherichia coli Primase. Journal of Biological Chemistry, 2005, 280, 11495-11504.  | 3.4  | 62        |
| 92  | <i>De Novo</i> Discovery of Nonstandard Macrocyclic Peptides as Noncompetitive Inhibitors of the Zika Virus NS2B-NS3 Protease. ACS Medicinal Chemistry Letters, 2019, 10, 168-174.  | 2.8  | 62        |
| 93  | Protein structure and interactions by combined use of sequential NMR assignments and isotope labeling. Journal of the American Chemical Society, 1987, 109, 1090-1092.  | 13.7 | 61        |
| 94  | Glutaredoxin-3 from Escherichia coli. Journal of Biological Chemistry, 1996, 271, 6736-6745.  | 3.4  | 61        |
| 95  | Role of Charged and Hydrophobic Residues in the Oligomerization of the PYRIN Domain of ASC. Biochemistry, 2005, 44, 575-583.  | 2.5  | 61        |
| 96  | Protein hydration in aqueous solution. Faraday Discussions, 1992, 93, 35-45.  | 3.2  | 60        |
| 97  | <sup>1</sup> H-Detected INEPT-INADEQUATE at Natural <sup>13</sup> C Abundance. Journal of Magnetic Resonance Series A, 1995, 113, 128-130.  | 1.6  | 60        |
| 98  | Pathway of chymotrypsin evolution suggested by the structure of the FMN-binding protein from Desulfovibrio vulgaris (Miyazaki F). Nature Structural Biology, 1997, 4, 975-979.  | 9.7  | 60        |
| 99  | NMR structure of the LCCL domain and implications for DFNA9 deafness disorder. EMBO Journal, 2001, 20, 5347-5353.   | 7.8  | 60        |
| 100 | Cell-Free Protein Synthesis for Analysis by NMR Spectroscopy. Methods in Molecular Biology, 2008, 426, 257-268.   | 0.9  | 60        |
| 101 | Sequence-Specific and Stereospecific Assignment of Methyl Groups Using Paramagnetic Lanthanides. Journal of the American Chemical Society, 2007, 129, 13749-13757.  | 13.7 | 59        |
| 102 | Gd <sup>3+</sup> Spin Labeling for Measuring Distances in Biomacromolecules. Methods in Enzymology, 2015, 563, 415-457.   | 1.0  | 59        |
| 103 | How reliable are pseudocontact shifts induced in proteins and ligands by mobile paramagnetic metal tags? A modelling study. Journal of Biomolecular NMR, 2013, 56, 203-216.   | 2.8  | 58        |
| 104 | Editing of 2D <sup>1</sup> H NMR spectra using X half-filters. combined use with residue-selective <sup>15</sup> N labeling of proteins. Journal of Magnetic Resonance, 1986, 70, 500-505.  | 0.5  | 57        |
| 105 | POMA: A Complete Mathematica Implementation of the NMR Product-Operator Formalism. Journal of Magnetic Resonance Series A, 1993, 101, 103-105.  | 1.6  | 57        |
| 106 | Lipid membrane binding of NK-lysin. FEBS Letters, 1998, 425, 341-344.   | 2.8  | 57        |
| 107 | Solution Structure of a Naturally-Occurring Zinc <sup>2+</sup> Peptide Complex Demonstrates that the N-Terminal Zinc-Binding Module of the Lasp-1 LIM Domain Is an Independent Folding Unit. Biochemistry, 1996, 35, 12723-12732. | 2.5  | 56        |
| 108 | Weak Alignment of Paramagnetic Proteins Warrants Correction for Residual CSA Effects in Measurements of Pseudocontact Shifts. Journal of the American Chemical Society, 2005, 127, 17190-17191.                                   | 13.7 | 56        |

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|-----|--|------|-----------|
| 109 | Efficient $\beta$ -tensor determination and NH assignment of paramagnetic proteins. <i>Journal of Biomolecular NMR</i> , 2006, 35, 79-87.  | 2.8  | 56        |
| 110 | [Ln(DPA) <sub>3</sub> ] <sup>3+</sup> Is a Convenient Paramagnetic Shift Reagent for Protein NMR Studies. <i>Journal of the American Chemical Society</i> , 2009, 131, 10352-10353.  | 13.7 | 56        |
| 111 | NMR structure determination reveals that the homeodomain is connected through a flexible linker to the main body in the <i>Drosophila Antennapedia</i> protein.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1992, 89, 10738-10742. | 7.1  | 55        |
| 112 | Polypeptide hydration in mixed solvents at low temperatures. <i>Journal of the American Chemical Society</i> , 1992, 114, 7093-7095.   | 13.7 | 55        |
| 113 | Warum Pentose- und nicht Hexose-NucleinsÄuren??. Teil VI. â€ˆHomo-DNSâ€™:1H-,13C-,31P- und15N-NMR-spektroskopische Untersuchung von ddGlc(A-A-A-A-T-T-T-T) in wÄssriger LÄ¶sung. <i>Helvetica Chimica Acta</i> , 1993, 76, 2701-2756.  | 1.6  | 55        |
| 114 | Amino-acid Type Identification in 15N-HSQC Spectra by Combinatorial Selective 15N-labelling. <i>Journal of Biomolecular NMR</i> , 2006, 34, 13-21.   | 2.8  | 55        |
| 115 | Gadolinium(III) Spin Labels for Highâ€™Sensitivity Distance Measurements in Transmembrane Helices. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 11831-11834.   | 13.8 | 54        |
| 116 | The unstructured C-terminus of the $\beta$ , subunit of <i>Escherichia coli</i> DNA polymerase III holoenzyme is the site of interaction with the $\alpha$ subunit. <i>Nucleic Acids Research</i> , 2007, 35, 2813-2824.   | 14.5 | 53        |
| 117 | Sensitive NMR Approach for Determining the Binding Mode of Tightly Binding Ligand Molecules to Protein Targets. <i>Journal of the American Chemical Society</i> , 2016, 138, 4539-4546.  | 13.7 | 53        |
| 118 | NMR Structure of <i>Citrobacter freundii</i> AmpD, Comparison with Bacteriophage T7 Lysozyme and Homology with PGRP Domains. <i>Journal of Molecular Biology</i> , 2003, 327, 833-842.   | 4.2  | 52        |
| 119 | W-band orientation selective DEER measurements on a Gd <sup>3+</sup> /nitroxide mixed-labeled protein dimer with a dual mode cavity. <i>Journal of Magnetic Resonance</i> , 2013, 227, 66-71.  | 2.1  | 52        |
| 120 | Bound or Free: Interaction of the C-Terminal Domain of <i>Escherichia coli</i> Single-Stranded DNA-Binding Protein (SSB) with the Tetrameric Core of SSB. <i>Biochemistry</i> , 2014, 53, 1925-1934.   | 2.5  | 52        |
| 121 | Thiolâ€™ene reaction: a versatile tool in site-specific labelling of proteins with chemically inert tags for paramagnetic NMR. <i>Chemical Communications</i> , 2012, 48, 2704.  | 4.1  | 51        |
| 122 | 3â€™Mercaptoâ€™2,6â€™Pyridinedicarboxylic Acid: A Small Lanthanideâ€™Binding Tag for Protein Studies by NMR Spectroscopy. <i>Chemistry - A European Journal</i> , 2010, 16, 3827-3832.   | 3.3  | 50        |
| 123 | Binding mode of the activityâ€™modulating Câ€™terminal segment of $\langle NS \rangle_2 B$ to $\langle NS \rangle_3$ in the dengue virus $\langle NS \rangle_2 B$ â€™ $\langle NS \rangle_3$ protease. <i>FEBS Journal</i> , 2014, 281, 1517-1533.                               | 4.7  | 50        |
| 124 | Improved Spectral Resolution in 1H NMR Spectroscopy by Homonuclear Semiselective Shaped Pulse Decoupling during Acquisition. <i>Journal of the American Chemical Society</i> , 1994, 116, 8847-8848.   | 13.7 | 49        |
| 125 | High-yield cell-free protein synthesis for site-specific incorporation of unnatural amino acids at two sites. <i>Biochemical and Biophysical Research Communications</i> , 2012, 418, 652-656.   | 2.1  | 49        |
| 126 | NMR studies of ligand binding. <i>Current Opinion in Structural Biology</i> , 2018, 48, 16-22.   | 5.7  | 48        |



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|-----|--|------|-----------|
| 127 | Determination of the Nuclear Magnetic Resonance Structure of the DNA-binding Domain of the P22 c2 Repressor (1 to 76) in Solution and Comparison with the DNA-binding Domain of the 434 Repressor. <i>Journal of Molecular Biology</i> , 1994, 235, 1003-1020. | 4.2  | 47        |
| 128 | Water molecules in DNA recognition I: hydration lifetimes of trp operator DNA in solution measured by NMR spectroscopy 1 Edited by B. Honig. <i>Journal of Molecular Biology</i> , 1998, 282, 847-858.   | 4.2  | 47        |
| 129 | Modulation of the distance dependence of paramagnetic relaxation enhancements by CSA—DSA cross-correlation. <i>Journal of Magnetic Resonance</i> , 2004, 171, 233-243.   | 2.1  | 46        |
| 130 | The dengue virus NS2B—NS3 protease retains the closed conformation in the complex with BPTI. <i>FEBS Letters</i> , 2014, 588, 2206-2211.   | 2.8  | 46        |
| 131 | Biocompatible Macrocyclization between Cysteine and 2-Cyanopyridine Generates Stable Peptide Inhibitors. <i>Organic Letters</i> , 2019, 21, 4709-4712.   | 4.6  | 46        |
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