Claudio Luchinat

List of Publications by Year in descending order

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7096 25,369 616 78 citations h-index papers

116 g-index

651 651 651 docs citations times ranked all docs

18150 citing authors

20358

#	Article	IF	CITATIONS
1	Magnetic susceptibility in paramagnetic NMR. Progress in Nuclear Magnetic Resonance Spectroscopy, 2002, 40, 249-273.	7.5	431
2	Perspectives on NMR in drug discovery: a technique comes of age. Nature Reviews Drug Discovery, 2008, 7, 738-745.	46.4	373
3	Solution Structure of Oxidized Horse Heart Cytochrome câ€,⊥. Biochemistry, 1997, 36, 9867-9877.	2.5	290
4	NMR Spectroscopy of Paramagnetic Metalloproteins. ChemBioChem, 2005, 6, 1536-1549.	2.6	289
5	A New Structural Model of A \hat{l}^2 (sub> 40 Fibrils. Journal of the American Chemical Society, 2011, 133, 16013-16022.	13.7	289
6	Standard operating procedures for pre-analytical handling of blood and urine for metabolomic studies and biobanks. Journal of Biomolecular NMR, 2011, 49, 231-243.	2.8	285
7	Facing and Overcoming Sensitivity Challenges in Biomolecular NMR Spectroscopy. Angewandte Chemie - International Edition, 2015, 54, 9162-9185.	13.8	258
8	Highâ€Throughput Metabolomics by 1D NMR. Angewandte Chemie - International Edition, 2019, 58, 968-994.	13.8	254
9	Evidence of different metabolic phenotypes in humans. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 1420-1424.	7.1	231
10	Lanthanide-Induced Pseudocontact Shifts for Solution Structure Refinements of Macromolecules in Shells up to 40 Å from the Metal Ion. Journal of the American Chemical Society, 2000, 122, 4154-4161.	13.7	212
11	From The Cover: Experimentally exploring the conformational space sampled by domain reorientation in calmodulin. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 6841-6846.	7.1	209
12	Accurate, Fully-Automated NMR Spectral Profiling for Metabolomics. PLoS ONE, 2015, 10, e0124219.	2.5	206
13	Standardizing the experimental conditions for using urine in NMR-based metabolomic studies with a particular focus on diagnostic studies: a review. Metabolomics, 2015, 11, 872-894.	3.0	196
14	Magnetic Susceptibility Tensor Anisotropies for a Lanthanide Ion Series in a Fixed Protein Matrix. Journal of the American Chemical Society, 2001, 123, 4181-4188.	13.7	183
15	Metabolomic NMR Fingerprinting to Identify and Predict Survival of Patients with Metastatic Colorectal Cancer. Cancer Research, 2012, 72, 356-364.	0.9	181
16	Protonless NMR Experiments for Sequence-Specific Assignment of Backbone Nuclei in Unfolded Proteins. Journal of the American Chemical Society, 2006, 128, 3918-3919.	13.7	176
17	The synthesis and <i>in vitro</i> testing of a zinc-activated MRI contrast agent. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 13881-13886.	7.1	172
18	Mechanistic Studies of a Calcium-Dependent MRI Contrast Agent. Inorganic Chemistry, 2002, 41, 4018-4024.	4.0	166

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19	Solid-state NMR of proteins sedimented by ultracentrifugation. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 10396-10399.	7.1	163
20	Dynamic nuclear polarization at high magnetic fields in liquids. Progress in Nuclear Magnetic Resonance Spectroscopy, 2012, 64, 4-28.	7.5	162
21	The Metabonomic Signature of Celiac Disease. Journal of Proteome Research, 2009, 8, 170-177.	3.7	160
22	Conformational Space of Flexible Biological Macromolecules from Average Data. Journal of the American Chemical Society, 2010, 132, 13553-13558.	13.7	155
23	The iron-sulfur cluster (Fe4S4) centers in ferredoxins studied through proton and carbon hyperfine coupling. Sequence-specific assignments of cysteines in ferredoxins from Clostridium acidi urici and Clostridium pasteurianum. Journal of the American Chemical Society, 1994, 116, 651-660.	13.7	147
24	The crystal structure of yeast copper thionein: The solution of a long-lasting enigma. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 51-56.	7.1	146
25	Conformational variability of matrix metalloproteinases: Beyond a single 3D structure. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 5334-5339.	7.1	143
26	Albumin Binding, Relaxivity, and Water Exchange Kinetics of the Diastereoisomers of MS-325, a Gadolinium(III)-Based Magnetic Resonance Angiography Contrast Agent. Inorganic Chemistry, 2007, 46, 6632-6639.	4.0	143
27	Individual Human Phenotypes in Metabolic Space and Time. Journal of Proteome Research, 2009, 8, 4264-4271.	3.7	143
28	Proton NOE studies on dicopper(II) dicobalt(II) superoxide dismutase. Inorganic Chemistry, 1989, 28, 4650-4656.	4.0	140
29	COordination of Standards in MetabOlomicS (COSMOS): facilitating integrated metabolomics data access. Metabolomics, 2015, 11, 1587-1597.	3.0	140
30	Cobalt(II) as a probe of the structure and function of carbonic anhydrase. Accounts of Chemical Research, 1983, 16, 272-279.	15.6	139
31	The Gâ€Triplex DNA. Angewandte Chemie - International Edition, 2013, 52, 2269-2273.	13.8	133
32	A Modular System for the Synthesis of Multiplexed Magnetic Resonance Probes. Journal of the American Chemical Society, 2011, 133, 5329-5337.	13.7	126
33	Carbonic anhydrase: An insight into the zinc binding site and into the active cavity through metal substitution., 1982,, 45-92.		124
34	Paramagnetism-Based NMR Restraints Provide Maximum Allowed Probabilities for the Different Conformations of Partially Independent Protein Domains. Journal of the American Chemical Society, 2007, 129, 12786-12794.	13.7	124
35	Recommendations and Standardization of Biomarker Quantification Using NMR-Based Metabolomics with Particular Focus on Urinary Analysis. Journal of Proteome Research, 2016, 15, 360-373.	3.7	122
36	Spectroscopic studies on Cu2Zn2SOD: a continuous advancement of investigation tools. Coordination Chemistry Reviews, 1990, 100, 67-103.	18.8	120

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37	Paramagnetism-Based Restraints for Xplor-NIH. Journal of Biomolecular NMR, 2004, 28, 249-261.	2.8	119
38	High-Field Dynamic Nuclear Polarization with High-Spin Transition Metal lons. Journal of the American Chemical Society, 2011, 133, 5648-5651.	13.7	119
39	Field Dependent Dynamic Nuclear Polarization with Radicals in Aqueous Solution. Journal of the American Chemical Society, 2008, 130, 3254-3255.	13.7	117
40	High-Resolution Solid-State NMR Structure of a 17.6 kDa Protein. Journal of the American Chemical Society, 2010, 132, 1032-1040.	13.7	117
41	A Computer Program for the Calculation of Paramagnetic Enhancements of Nuclear-Relaxation Rates in Slowly Rotating Systems. Journal of Magnetic Resonance Series A, 1995, 113, 151-158.	1.6	116
42	pKa of zinc-bound water and nucleophilicity of hydroxo-containing species. Ab initio calculations on models for zinc enzymes. Inorganic Chemistry, 1990, 29, 1460-1463.	4.0	114
43	Paramagnetic constraints: An aid for quick solution structure determination of paramagnetic metalloproteins. Concepts in Magnetic Resonance, 2002, 14, 259-286.	1.3	112
44	Proton NMR spectroscopy and the electronic structure of the high potential iron-sulfur protein from Chromatium vinosum. Journal of the American Chemical Society, 1991, 113, 1237-1245.	13.7	111
45	Bimodal Fluorescence-Magnetic Resonance Contrast Agent for Apoptosis Imaging. Journal of the American Chemical Society, 2019, 141, 6224-6233.	13.7	111
46	Partial Orientation of Oxidized and Reduced Cytochromeb5at High Magnetic Fields:Â Magnetic Susceptibility Anisotropy Contributions and Consequences for Protein Solution Structure Determination. Journal of the American Chemical Society, 1998, 120, 12903-12909.	13.7	110
47	Ultrafast MAS Solid-State NMR Permits Extensive ¹³ C and ¹ H Detection in Paramagnetic Metalloproteins. Journal of the American Chemical Society, 2010, 132, 5558-5559.	13.7	109
48	High Relaxivity Gd(III)–DNA Gold Nanostars: Investigation of Shape Effects on Proton Relaxation. ACS Nano, 2015, 9, 3385-3396.	14.6	108
49	Perspectives in paramagnetic NMR of metalloproteins. Dalton Transactions, 2008, , 3782.	3.3	107
50	High-Field NMR Studies of Oxidized Blue Copper Proteins:Â The Case of Spinach Plastocyanin. Journal of the American Chemical Society, 1999, 121, 2037-2046.	13.7	105
51	Structural Basis for Matrix Metalloproteinase 1-Catalyzed Collagenolysis. Journal of the American Chemical Society, 2012, 134, 2100-2110.	13.7	105
52	Uniqueness of the NMR approach to metabolomics. TrAC - Trends in Analytical Chemistry, 2019, 120, 115300.	11.4	103
53	Paramagnetism-based versus classical constraints: an analysis of the solution structure of Ca Ln calbindin D9k. Journal of Biomolecular NMR, 2001, 21, 85-98.	2.8	101
54	Accurate Solution Structures of Proteins from X-ray Data and a Minimal Set of NMR Data: Calmodulinâ "Peptide Complexes As Examples. Journal of the American Chemical Society, 2009, 131, 5134-5144.	13.7	101

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55	The three-dimensional structure in solution of the paramagnetic high-potential iron-sulfur protein I from Ectothiorhodospira halophila through nuclear magnetic resonance. FEBS Journal, 1994, 225, 715-725.	0.2	99
56	Pseudocontact shifts as constraints for energy minimization and molecular dynamics calculations on solution structures of paramagnetic metalloproteins. Proteins: Structure, Function and Bioinformatics, 1997, 29, 68-76.	2.6	99
57	Heme methyl 1H chemical shifts as structural parameters in some low-spin ferriheme proteins. Journal of Biological Inorganic Chemistry, 1999, 4, 515-519.	2.6	98
58	A Strategy for the NMR Characterization of Type II Copper(II) Proteins:Â the Case of the Copper Trafficking Protein CopC fromPseudomonasSyringae. Journal of the American Chemical Society, 2003, 125, 7200-7208.	13.7	98
59	Snapshots of the Reaction Mechanism of Matrix Metalloproteinases. Angewandte Chemie - International Edition, 2006, 45, 7952-7955.	13.8	98
60	Identification of the iron ions of high potential iron protein from Chromatium vinosum within the protein frame through two-dimensional NMR experiments. Journal of the American Chemical Society, 1992, 114, 3332-3340.	13.7	97
61	NMR and Electronic Relaxation in Paramagnetic Dicopper(II) Compounds. Journal of the American Chemical Society, 1997, 119, 2156-2162.	13.7	97
62	Tuning the Affinity for Lanthanides of Calcium Binding Proteins. Biochemistry, 2003, 42, 8011-8021.	2.5	96
63	Metabolomic fingerprint of severe obesity is dynamically affected by bariatric surgery in a procedure-dependent manner. American Journal of Clinical Nutrition, 2015, 102, 1313-1322.	4.7	96
64	Are true scalar protonâ€" proton connectivities ever measured in COSY spectra of paramagnetic macromolecules?. Chemical Physics Letters, 1993, 203, 445-449.	2.6	95
65	Structural Information through NMR Hyperfine Shifts in Blue Copper Proteins. Journal of the American Chemical Society, 2000, 122, 3701-3707.	13.7	95
66	Solution Structure of the Paramagnetic Complex of the N-Terminal Domain of Calmodulin with Two Ce3+lons by1H NMRâ€,‡. Biochemistry, 1997, 36, 11605-11618.	2.5	93
67	Nuclear spin relaxation in paramagnetic complexes of S=1: Electron spin relaxation effects. Journal of Chemical Physics, 1999, 111, 5795-5807.	3.0	93
68	Paramagnetic shifts in solid-state NMR of proteins to elicit structural information. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 17284-17289.	7.1	93
69	The electronic structure of FeS centers in proteins and models a contribution to the understanding of their electron transfer properties. Structure and Bonding, 1995, , 1-53.	1.0	91
70	The 1H NMR parameters of magnetically coupled dimersâ€"The Fe2S2 proteins as an example. , 1990, , 113-136.		87
71	Metabolomics in breast cancer: A decade in review. Cancer Treatment Reviews, 2018, 67, 88-96.	7.7	87
72	The electronic structure of iron-sulfur [Fe4S4]3+ clusters in proteins. An investigation of the oxidized high-potential iron-sulfur protein II from Ectothiorhodospira vacuolata. Biochemistry, 1993, 32, 9387-9397.	2.5	86

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73	Solution Structure of the Oxidized 2[4Fe-4S] Ferredoxin from Clostridium Pasteurianum. FEBS Journal, 1995, 232, 192-205.	0.2	86
74	Paramagnetically Induced Residual Dipolar Couplings for Solution Structure Determination of Lanthanide Binding Proteins. Journal of the American Chemical Society, 2002, 124, 5581-5587.	13.7	86
75	Paramagnetic Ions Provide Structural Restraints in Solid-State NMR of Proteins. Journal of the American Chemical Society, 2007, 129, 2218-2219.	13.7	85
76	Evidence of Reciprocal Reorientation of the Catalytic and Hemopexin-Like Domains of Full-Length MMP-12. Journal of the American Chemical Society, 2008, 130, 7011-7021.	13.7	84
77	Identification of a serum-detectable metabolomic fingerprint potentially correlated with the presence of micrometastatic disease in early breast cancer patients at varying risks of disease relapse by traditional prognostic methods. Annals of Oncology, 2011, 22, 1295-1301.	1.2	83
78	Serum metabolomic profiles evaluated after surgery may identify patients with oestrogen receptor negative early breast cancer at increased risk of disease recurrence. Results from a retrospective study. Molecular Oncology, 2015, 9, 128-139.	4.6	82
79	The three-dimensional solution structure of the reduced high-potential iron-sulfur protein from Chromatium vinosum through NMR. Biochemistry, 1995, 34, 206-219.	2.5	80
80	Plasma and urinary metabolomic profiles of Down syndrome correlate with alteration of mitochondrial metabolism. Scientific Reports, 2018, 8, 2977.	3.3	80
81	The CuA Center of a Soluble Domain from Thermus Cytochrome ba3. An NMR Investigation of the Paramagnetic Protein. Journal of the American Chemical Society, 1996, 118, 11658-11659.	13.7	78
82	Water 1H relaxation dispersion analysis on a nitroxide radical provides information on the maximal signal enhancement in Overhauser dynamic nuclear polarization experiments. Physical Chemistry Chemical Physics, 2010, 12, 5902.	2.8	78
83	Uncovering the metabolomic fingerprint of breast cancer. International Journal of Biochemistry and Cell Biology, 2011, 43, 1010-1020.	2.8	77
84	Long-Range Correlated Dynamics in Intrinsically Disordered Proteins. Journal of the American Chemical Society, 2014, 136, 16201-16209.	13.7	77
85	One-thousand-fold enhancement of high field liquid nuclear magnetic resonance signals at room temperature. Nature Chemistry, 2017, 9, 676-680.	13.6	77
86	Acyl positional distribution of glycerol tri-esters in vegetable oils: a 13C NMR study. Chemistry and Physics of Lipids, 1999, 103, 47-55.	3.2	76
87	Metabolomic/lipidomic profiling of COVID-19 and individual response to tocilizumab. PLoS Pathogens, 2021, 17, e1009243.	4.7	76
88	Interdomain Flexibility in Full-length Matrix Metalloproteinase-1 (MMP-1). Journal of Biological Chemistry, 2009, 284, 12821-12828.	3.4	73
89	Exploration of serum metabolomic profiles and outcomes in women with metastatic breast cancer: A pilot study. Molecular Oncology, 2012, 6, 437-444.	4.6	73
90	Exploring the Subtleties of Drugâ^'Receptor Interactions:Â The Case of Matrix Metalloproteinases. Journal of the American Chemical Society, 2007, 129, 2466-2475.	13.7	72

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91	Paramagnetic relaxation as a tool for solution structure determination: Clostridium pasteurianum ferredoxin as an example., 1997, 29, 348-358.		71
92	Liquid state DNP of water at 9.2 T: an experimental access to saturation. Physical Chemistry Chemical Physics, 2013, 15, 6049.	2.8	71
93	G-triplex structure and formation propensity. Nucleic Acids Research, 2014, 42, 13393-13404.	14.5	71
94	Evidence of the breaking of the copper-imidazolate bridge in copper/cobalt-substituted superoxide dismutase upon reduction of the copper(II) centers. Journal of the American Chemical Society, 1985, 107, 2178-2179.	13.7	70
95	Proton NMR spectra of oxidized high-potential iron-sulfur protein (HiPIP) from Rhodocyclus gelatinosus. A model for oxidized HiPIPs. Inorganic Chemistry, 1991, 30, 4517-4524.	4.0	70
96	Bond-Mediated Electron Tunneling in Ruthenium-Modified High-Potential Ironâ^'Sulfur Protein. Journal of the American Chemical Society, 2000, 122, 4532-4533.	13.7	70
97	Mechanistic Investigation of \hat{I}^2 -Galactosidase-Activated MR Contrast Agents. Inorganic Chemistry, 2008, 47, 56-68.	4.0	70
98	Entropic Contribution to the Linking Coefficient in Fragment Based Drug Design: A Case Study. Journal of Medicinal Chemistry, 2010, 53, 4285-4289.	6.4	70
99	A critical assessment of methods to recover information from averaged data. Physical Chemistry Chemical Physics, 2016, 18, 5686-5701.	2.8	70
100	The iron-sulfur cluster in the oxidized high-potential iron protein from Ectothiorhodospira halophila. Journal of the American Chemical Society, 1993, 115, 3431-3440.	13.7	69
101	A Serine â†' Cysteine Ligand Mutation in the High Potential Ironâ^'Sulfur Protein fromChromatium vinosumProvides Insight into the Electronic Structure of the [4Feâ^'4S] Cluster. Journal of the American Chemical Society, 1996, 118, 75-80.	13.7	69
102	The Solution Structure Refinement of the Paramagnetic Reduced High-Potential Iron-Sulfur Protein I from Ectothiorhodospira Halophila by Using Stable Isotope Labeling and Nuclear Relaxation. FEBS Journal, 1996, 241, 440-452.	0.2	69
103	1H NMRD PROFILES OF PARAMAGNETIC COMPLEXES AND METALLOPROTEINS. Advances in Inorganic Chemistry, 2005, 57, 105-172.	1.0	69
104	The Cardiovascular Risk of Healthy Individuals Studied by NMR Metabonomics of Plasma Samples. Journal of Proteome Research, 2011, 10, 4983-4992.	3.7	69
105	Solid-State NMR Crystallography through Paramagnetic Restraints. Journal of the American Chemical Society, 2012, 134, 5006-5009.	13.7	69
106	Paramagnetic Probes in Metalloproteins. Methods in Enzymology, 2001, 339, 314-340.	1.0	68
107	Examination of Matrix Metalloproteinase-1 in Solution. Journal of Biological Chemistry, 2013, 288, 30659-30671.	3.4	68
108	Paramagnetic NMR spectroscopy and coordination structure of cobalt(II) Cys112Asp azurin. Inorganic Chemistry, 1995, 34, 737-742.	4.0	67

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109	Quality assurance multicenter comparison of different MR scanners for quantitative diffusion-weighted imaging. Journal of Magnetic Resonance Imaging, 2016, 43, 213-219.	3.4	67
110	The solution structure of paramagnetic metalloproteins. Progress in Biophysics and Molecular Biology, 1996, 66, 43-80.	2.9	66
111	Characterization of a Partially Unfolded High Potential Iron Protein. Biochemistry, 1997, 36, 9332-9339.	2.5	66
112	Locating the Metal Ion in Calcium-Binding Proteins by Using Cerium(III) as a Probe. ChemBioChem, 2001, 2, 550-558.	2.6	66
113	Phenotyping COPD by 1H NMR metabolomics of exhaled breath condensate. Metabolomics, 2014, 10, 302-311.	3.0	66
114	Evidence of a DHA Signature in the Lipidome and Metabolome of Human Hepatocytes. International Journal of Molecular Sciences, 2017, 18, 359.	4.1	66
115	Age and Sex Effects on Plasma Metabolite Association Networks in Healthy Subjects. Journal of Proteome Research, 2018, 17, 97-107.	3.7	66
116	NMR-based metabolomics identifies patients at high risk of death within two years after acute myocardial infarction in the AMI-Florence II cohort. BMC Medicine, 2019, 17, 3.	5.5	66
117	PSEUDYANA for NMR structure calculation of paramagnetic metalloproteins using torsion angle molecular dynamics. Journal of Biomolecular NMR, 1998, 12, 553-557.	2.8	65
118	The First Solution Structure of a Paramagnetic Copper(II) Protein:Â The Case of Oxidized Plastocyanin from the CyanobacteriumSynechocystisPCC6803. Journal of the American Chemical Society, 2001, 123, 2405-2413.	13.7	65
119	Serum Metabolomic Profiles Identify ER-Positive Early Breast Cancer Patients at Increased Risk of Disease Recurrence in a Multicenter Population. Clinical Cancer Research, 2017, 23, 1422-1431.	7.0	65
120	Three-Dimensional Solution Structure of the Oxidized High Potential Iron-Sulfur Protein from Chromatium vinosum through NMR. Comparative Analysis with the Solution Structure of the Reduced Species. Biochemistry, 1995, 34, 9851-9858.	2.5	64
121	Analysis of the Temperature Dependence of the 1H and 13C Isotropic Shifts of Horse Heart Ferricytochromec: A Explanation of Curie and Anti-Curie Temperature Dependence and Nonlinear Pseudocontact Shifts in a Common Two-Level Framework. Journal of the American Chemical Society, 1998, 120, 8472-8479.	13.7	64
122	Sulfonamide-Functionalized Gadolinium DTPA Complexes as Possible Contrast Agents for MRI: A Relaxometric Investigation., 2000, 2000, 625-630.		64
123	Are Patients with Potential Celiac Disease Really Potential? The Answer of Metabonomics. Journal of Proteome Research, 2011, 10, 714-721.	3.7	64
124	Dynamic Nuclear Polarization of $\langle \sup 1 / \sup H, \langle \sup 13 / \sup C, \text{ and } \langle \sup 59 / \sup C \text{ in a Tris}(ethylenediamine)cobalt(III) Crystalline Lattice Doped with Cr(III). Journal of the American Chemical Society, 2014, 136, 11716-11727.$	13.7	64
125	Regulation of HuR structure and function by dihydrotanshinone-l. Nucleic Acids Research, 2017, 45, 9514-9527.	14.5	64
126	Structural Basis of Serine/Threonine Phosphatase Inhibition by the Archetypal Small Molecules Cantharidin and Norcantharidin. Journal of Medicinal Chemistry, 2009, 52, 4838-4843.	6.4	62

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127	SedNMR: On the Edge between Solution and Solid-State NMR. Accounts of Chemical Research, 2013, 46, 2059-2069.	15.6	62
128	Sarcolab pilot study into skeletal muscleâ∈™s adaptation to long-term spaceflight. Npj Microgravity, 2018, 4, 18.	3.7	62
129	13C Direct Detected NMR Increases the Detectability of Residual Dipolar Couplings. Journal of the American Chemical Society, 2006, 128, 15042-15043.	13.7	61
130	1H NMRD profiles of diamagnetic proteins: a model-free analysis. Magnetic Resonance in Chemistry, 2000, 38, 543-550.	1.9	60
131	Nanodiamond–Gadolinium(III) Aggregates for Tracking Cancer Growth In Vivo at High Field. Nano Letters, 2016, 16, 7551-7564.	9.1	60
132	An investigation of superoxide dismutase Lys-143, lle-143, and Glu-143 mutants: Cu2Co2SOD derivatives. Journal of the American Chemical Society, 1988, 110, 3629-3633.	13.7	59
133	Metabolomic fingerprint of heart failure in humans: A nuclear magnetic resonance spectroscopy analysis. International Journal of Cardiology, 2013, 168, e113-e115.	1.7	59
134	Allostasis and Resilience of the Human Individual Metabolic Phenotype. Journal of Proteome Research, 2015, 14, 2951-2962.	3.7	58
135	Thermotoga maritima IscU. Structural Characterization and Dynamics of a New Class of Metallochaperone. Journal of Molecular Biology, 2003, 331, 907-924.	4.2	57
136	sup>1H and $sup>13C$ Dynamic Nuclear Polarization in Aqueous Solution with a Two-Field (0.35 T/14 T) Shuttle DNP Spectrometer. Journal of the American Chemical Society, 2009, 131, 15086-15087.	13.7	57
137	EF-hand protein dynamics and evolution of calcium signal transduction: an NMR view. Journal of Biological Inorganic Chemistry, 2006, 11, 949-962.	2.6	56
138	Dynamic Nuclear Polarization of Sedimented Solutes. Journal of the American Chemical Society, 2013, 135, 1641-1644.	13.7	56
139	The epr spectra of the inhibitor derivatives of cobalt carbonic anhydrase. Journal of Inorganic Biochemistry, 1981, 14, 81-93.	3.5	55
140	Browsing gene banks for Fe2S2 ferredoxins and structural modeling of 88 plant-type sequences: An analysis of fold and function. Proteins: Structure, Function and Bioinformatics, 2002, 46, 110-127.	2.6	55
141	In vitro fermentation of potential prebiotic flours from natural sources: Impact on the human colonic microbiota and metabolome. Molecular Nutrition and Food Research, 2012, 56, 1342-1352.	3.3	55
142	1H-NMR studies on partially and fully reduced 2(4Fe-4S) ferredoxin from Clostridium pasteurianum. FEBS Journal, 1992, 204, 831-839.	0.2	54
143	Paramagnetic Metal lons in Ligand Screening: The Coll Matrix Metalloproteinase 12. Angewandte Chemie - International Edition, 2004, 43, 2254-2256.	13.8	54
144	Magnetic susceptibility and paramagnetism-based NMR. Progress in Nuclear Magnetic Resonance Spectroscopy, 2019, 114-115, 211-236.	7.5	54

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145	Hydrogen-1 NMR spectra of the coordination sphere of cobalt-substituted carbonic anhydrase. Journal of the American Chemical Society, 1981, 103, 7784-7788.	13.7	53
146	Water Exchange at the Active Site of Carbonic Anhydrase. Biophysical Journal, 1983, 41, 179-187.	0.5	53
147	A Heteronuclear Direct-Detection NMR Spectroscopy Experiment for Protein-Backbone Assignment. Angewandte Chemie - International Edition, 2004, 43, 2257-2259.	13.8	52
148	Persistent contrast enhancement by sterically stabilized paramagnetic liposomes in murine melanoma. Magnetic Resonance in Medicine, 2004, 52, 669-672.	3.0	52
149	Unraveling Hidden Regulatory Sites in Structurally Homologous Metalloproteases. Journal of Molecular Biology, 2013, 425, 2330-2346.	4.2	52
150	Recognition Pliability Is Coupled to Structural Heterogeneity: A Calmodulin Intrinsically Disordered Binding Region Complex. Structure, 2012, 20, 522-533.	3.3	51
151	Pseudoâ€Contact NMR Shifts over the Paramagnetic Metalloprotein CoMMPâ€12 from First Principles. Angewandte Chemie - International Edition, 2016, 55, 14713-14717.	13.8	51
152	Identification of productive and futile encounters in an electron transfer protein complex. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E1840-E1847.	7.1	51
153	Backbone Dynamics of Plastocyanin in Both Oxidation States. Journal of Biological Chemistry, 2001, 276, 47217-47226.	3.4	50
154	Gd(III)-Labeled Peptide Nanofibers for Reporting on Biomaterial Localization <i>in Vivo</i> . ACS Nano, 2014, 8, 7325-7332.	14.6	50
155	Basic facts and perspectives of Overhauser DNP NMR. Journal of Magnetic Resonance, 2016, 264, 78-87.	2.1	50
156	nmrML: A Community Supported Open Data Standard for the Description, Storage, and Exchange of NMR Data. Analytical Chemistry, 2018, 90, 649-656.	6.5	50
157	High resolution solution structure of the protein part of Cu7 metallothionein. FEBS Journal, 2000, 267, 1008-1018.	0.2	49
158	Crystal Structure of the Catalytic Domain of Human Matrix Metalloproteinase 10. Journal of Molecular Biology, 2004, 336, 707-716.	4.2	49
159	Local and Global Dynamics in Intrinsically Disordered Synuclein. Angewandte Chemie - International Edition, 2018, 57, 15262-15266.	13.8	49
160	NMR for sample quality assessment in metabolomics. New Biotechnology, 2019, 52, 25-34.	4.4	49
161	Proton NMR studies of the cobalt(II)-metallothionein system. Journal of the American Chemical Society, 1989, 111, 7296-7300.	13.7	48
162	Solution Structure of the Oxidized Fe7S8Ferredoxin from the Thermophilic BacteriumBacillusschlegeliiby1H NMR Spectroscopyâ€,‡. Biochemistry, 1998, 37, 9812-9826.	2.5	48

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163	On the use of ultracentrifugal devices for sedimented solute NMR. Journal of Biomolecular NMR, 2012, 54, 123-127.	2.8	48
164	Extreme Hypoxic Conditions Induce Selective Molecular Responses and Metabolic Reset in Detached Apple Fruit. Frontiers in Plant Science, 2016, 7, 146.	3.6	48
165	Deconvoluting interrelationships between concentrations and chemical shifts in urine provides a powerful analysis tool. Nature Communications, 2017, 8, 1662.	12.8	48
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