Robert Konrat

List of Publications by Year
in descending order

80 papers	2,106 citations	304368 22 h-index	276539 41 g-index
91 all docs	91 docs citations	91 times ranked	2311 citing authors

#	Article	IF	Citations
1	Long-range structural preformation in yes-associated protein precedes encounter complex formation with TEAD. IScience, 2022, 25, 104099.	1.9	5
2	Temperature as an Extra Dimension in Multidimensional Protein NMR Spectroscopy. Chemistry - A European Journal, 2021, 27, 1753-1767.	1.7	9
3	Using Crossâ€Correlated Spin Relaxation to Characterize Backbone Dihedral Angle Distributions of Flexible Protein Segments. ChemPhysChem, 2021, 22, 18-28.	1.0	7
4	Membrane Interactions of Î±-Synuclein Revealed by Multiscale Molecular Dynamics Simulations, Markov State Models, and NMR. Journal of Physical Chemistry B, 2021, 125, 2929-2941.	1.2	17
5	Molecular basis of F-actin regulation and sarcomere assembly via myotilin. PLoS Biology, 2021, 19, e3001148.	2.6	9
6	Hyperphosphorylation of Human Osteopontin and Its Impact on Structural Dynamics and Molecular Recognition. Biochemistry, 2021, 60, 1347-1355.	1.2	15
7	Binding Mode Characterization of Osteopontin on Hydroxyapatite by Solution NMR Spectroscopy. ChemBioChem, 2021, 22, 2300-2305.	1.3	5
8	Cosolute modulation of protein oligomerization reactions in the homeostatic timescale. Biophysical Journal, 2021, 120, 2067-2077.	0.2	2
9	Order from disorder in the sarcomere: FATZ forms a fuzzy but tight complex and phase-separated condensates with Î±-actinin. Science Advances, 2021, 7, .	4.7	15
10	Onâ€Cell NMR Contributions to Membrane Receptor Binding Characterization. ChemPlusChem, 2021, 86, 938-945.	1.3	3
11	Association between Predicted Effects of TP53 Missense Variants on Protein Conformation and Their Phenotypic Presentation as Li-Fraumeni Syndrome or Hereditary Breast Cancer. International Journal of Molecular Sciences, 2021, 22, 6345.	1.8	3
12	Detecting anisotropic segmental dynamics in disordered proteins by cross-correlated spin relaxation. Magnetic Resonance, 2021, 2, 557-569.	0.8	6
13	A Step Towards NRF2â€DNA Interaction Inhibitors by Fragmentâ€Based NMR Methods. ChemMedChem, 2021, 16, 3576-3587.	1.6	3
14	19 Fâ€...NMR Spectroscopy Tagging and Paramagnetic Relaxation Enhancementâ€Based Conformation Analysis of Intrinsically Disordered Protein Complexes. ChemBioChem, 2020, 21, 696-701.	1.3	11
15	NMR Characterization of Surface Receptor Protein Interactions in Live Cells Using Methylcellulose Hydrogels. Angewandte Chemie - International Edition, 2020, 59, 3886-3890.	7.2	13
16	NMR Characterization of Surface Receptor Protein Interactions in Live Cells Using Methylcellulose Hydrogels. Angewandte Chemie, 2020, 132, 3914-3918.	1.6	4
17	The Ambivalent Role of Proline Residues in an Intrinsically Disordered Protein: From Disorder Promoters to Compaction Facilitators. Journal of Molecular Biology, 2020, 432, 3093-3111.	2.0	65
18	Osteopontin regulates biomimetic calcium phosphate crystallization from disordered mineral layers covering apatite crystallites. Scientific Reports, 2020, 10, 15722.	1.6	23

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19	Titelbild: PI by NMR: Probing CHâ€“Ï€ Interactions in Proteinâ€“Ligand Complexes by NMR Spectroscopy (Angew. Chem. 35/2020). Angewandte Chemie, 2020, 132, 14805-14805.	1.6	1
20	PI by NMR: Probing CHâ€“Ï€ Interactions in Proteinâ€“Ligand Complexes by NMR Spectroscopy. Angewandte Chemie - International Edition, 2020, 59, 14861-14868.	7.2	39
21	Sensitivity-enhanced three-dimensional and carbon-detected two-dimensional NMR of proteins using hyperpolarized water. Journal of Biomolecular NMR, 2020, 74, 161-171.	1.6	17
22	A novel high-dimensional NMR experiment for resolving protein backbone dihedral angle ambiguities. Journal of Biomolecular NMR, 2020, 74, 257-265.	1.6	4
23	PI by NMR: Probing CHâ€“Ï€ Interactions in Proteinâ€“Ligand Complexes by NMR Spectroscopy. Angewandte Chemie, 2020, 132, 14971-14978.	1.6	7
24	Binding of the protein ICln to Î±-integrin contributes to the activation of IClswell current. Scientific Reports, 2019, 9, 12195.	1.6	4
25	NMR Characterization of Longâ€Range Contacts in Intrinsically Disordered Proteins from Paramagnetic Relaxation Enhancement in ¹³C Directâ€Detection Experiments. ChemBioChem, 2019, 20, 335-339.	1.3	21
26	1H, 15N, 13C resonance assignment of the human CD44 cytoplasmic tail (669â€“742). Biomolecular NMR Assignments, 2019, 13, 109-113.	0.4	2
27	1H, 13C, 15N resonance assignment of human YAP 50â€“171 fragment. Biomolecular NMR Assignments, 2018, 12, 179-182.	0.4	8
28	19F multiple-quantum coherence NMR spectroscopy for probing proteinâ€“ligand interactions. RSC Advances, 2018, 8, 40687-40692.	1.7	3
29	Late metabolic precursors for selective aromatic residue labeling. Journal of Biomolecular NMR, 2018, 71, 129-140.	1.6	18
30	Modulation of Correlated Segment Fluctuations in IDPs upon Complex Formation as an Allosteric Regulatory Mechanism. Journal of Molecular Biology, 2018, 430, 2439-2452.	2.0	26
31	Selective targeting of 3 repeat Tau with brain penetrating single chain antibodies for the treatment of neurodegenerative disorders. Acta Neuropathologica, 2018, 136, 69-87.	3.9	23
32	Highly Selective Stable Isotope Labeling of Histidine Residues by Using a Novel Precursor in E.â€…coliâ€Based Overexpression Systems. ChemBioChem, 2017, 18, 1487-1491.	1.3	9
33	Investigation of Intrinsically Disordered Proteins through Exchange with Hyperpolarized Water. Angewandte Chemie - International Edition, 2017, 56, 389-392.	7.2	53
34	NMR probing and visualization of correlated structural fluctuations in intrinsically disordered proteins. Physical Chemistry Chemical Physics, 2017, 19, 10651-10656.	1.3	18
35	Anthranilic acid, the new player in the ensemble of aromatic residue labeling precursor compounds. Journal of Biomolecular NMR, 2017, 69, 13-22.	1.6	12
36	Direct NMR Probing of Hydration Shells of Protein Ligand Interfaces and Its Application to Drug Design. Journal of Medicinal Chemistry, 2017, 60, 8708-8715.	2.9	25

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37	A histone-mimicking interdomain linker in a multidomain protein modulates multivalent histone binding. Journal of Biological Chemistry, 2017, 292, 17643-17657.	1.6	15
38	Untersuchung von intrinsisch unstrukturierten Proteinen mithilfe des Austausches mit hyperpolarisiertem Wasser. Angewandte Chemie, 2017, 129, 397-401.	1.6	6
39	Calcium-dependent binding of Myc to calmodulin. Oncotarget, 2017, 8, 3327-3343.	0.8	16
40	Nâ€Lauroylation during the Expression of Recombinant Nâ€Myristoylated Proteins: Implications and Solutions. ChemBioChem, 2016, 17, 82-89.	1.3	4
41	Excited States of Nucleic Acids Probed by Proton Relaxation Dispersion NMR Spectroscopy. Angewandte Chemie, 2016, 128, 12187-12191.	1.6	8
42	Excited States of Nucleic Acids Probed by Proton Relaxation Dispersion NMR Spectroscopy. Angewandte Chemie - International Edition, 2016, 55, 12008-12012.	7.2	48
43	Five and four dimensional experiments for robust backbone resonance assignment of large intrinsically disordered proteins: application to Tau3x protein. Journal of Biomolecular NMR, 2016, 65, 193-203.	1.6	9
44	1H, 15N, 13C resonance assignment of human GAP-43. Biomolecular NMR Assignments, 2016, 10, 171-174.	0.4	8
45	Biochemical and Structural Characterization of the Interaction between the Siderocalin NGAL/LCN2 (Neutrophil Gelatinase-associated Lipocalin/Lipocalin 2) and the N-terminal Domain of Its Endocytic Receptor SLC22A17. Journal of Biological Chemistry, 2016, 291, 2917-2930.	1.6	45
46	1H, 15N, 13C resonance assignment of human osteopontin. Biomolecular NMR Assignments, 2015, 9, 289-292.	0.4	8
47	NMR Spectroscopic Studies of the Conformational Ensembles of Intrinsically Disordered Proteins. Advances in Experimental Medicine and Biology, 2015, 870, 149-185.	0.8	22
48	IDPs: Less Disordered and More Ordered than Expected. Biophysical Journal, 2015, 109, 1309-1311.	0.2	4
49	Strategies for purifying variants of human rhinovirus 14 2C protein. Protein Expression and Purification, 2014, 95, 28-37.	0.6	4
50	Compensatory Adaptations of Structural Dynamics in an Intrinsically Disordered Protein Complex. Angewandte Chemie - International Edition, 2014, 53, 3840-3843.	7.2	59
51	NMR contributions to structural dynamics studies of intrinsically disordered proteins. Journal of Magnetic Resonance, 2014, 241, 74-85.	1.2	153
52	Cooperative Unfolding of Compact Conformations of the Intrinsically Disordered Protein Osteopontin. Biochemistry, 2013, 52, 5167-5175.	1.2	90
53	Î±-Ketoacids as precursors for phenylalanine and tyrosine labelling in cell-based protein overexpression. Journal of Biomolecular NMR, 2013, 57, 327-331.	1.6	36
54	BEST-TROSY experiments for time-efficient sequential resonance assignment of large disordered proteins. Journal of Biomolecular NMR, 2013, 55, 311-321.	1.6	193

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55	Probing Local Backbone Geometries in Intrinsically Disordered Proteins by Crossâ€Correlated NMR Relaxation. Angewandte Chemie, 2013, 125, 4702-4704.	1.6	0
56	Meta-structure correlation in protein space unveils different selection rules for folded and intrinsically disordered proteins. Molecular BioSystems, 2012, 8, 411-416.	2.9	12
57	The Metastasis-Associated Extracellular Matrix Protein Osteopontin Forms Transient Structure in Ligand Interaction Sites. Biochemistry, 2011, 50, 6113-6124.	1.2	64
58	The Meandering of Disordered Proteins in Conformational Space. Structure, 2010, 18, 416-419.	1.6	13
59	The protein meta-structure: a novel concept for chemical and molecular biology. Cellular and Molecular Life Sciences, 2009, 66, 3625-3639.	2.4	46
60	Backbone assignment of osteopontin, a cytokine and cell attachment protein implicated in tumorigenesis. Biomolecular NMR Assignments, 2008, 2, 29-31.	0.4	11
61	Letter to the editor: Backbone assignment of the dimerization and DNA-binding domain of the oncogenic transcription factor v-Myc in complex with its authentic binding partner Max. Journal of Biomolecular NMR, 2004, 30, 361-362.	1.6	6
62	Automated NMR determination of protein backbone dihedral angles from cross-correlated spin relaxation. Journal of Biomolecular NMR, 2002, 22, 349-363.	1.6	31
63	Structure, function, and dynamics of the dimerization and DNA-binding domain of oncogenic transcription factor v-Myc11Edited by P. E. Wright. Journal of Molecular Biology, 2001, 307, 1395-1410.	2.0	96
64	Mapping the ligand binding site at protein side-chains in protein-ligand complexes through NOE difference spectroscopy. Journal of Biomolecular NMR, 2001, 20, 195-202.	1.6	15
65	Simultaneous measurement of intra- and intermolecular NOEs in differentially labeled protein-ligand complexes. Journal of Biomolecular NMR, 2001, 21, 107-116.	1.6	21
66	Differential multiple-quantum relaxation arising from cross-correlated time-modulation of isotropic chemical shifts. , 2000, 18, 33-42.		77
67	Sequence-specific resonance assignments of Q83, a lipocalin highly expressed in v-myc-transformed avian fibroblasts. Journal of Biomolecular NMR, 2000, 17, 177-178.	1.6	4
68	Measurement of the protein backbone dihedral angle phi based on quantification of remote CSA/DD interference in inter-residue 13C'(i - 1)-13Calpha(i) multiple-quantum coherences. , 2000, 17, 265-268.		22
69	Peptide Plane Torsion Angles in Proteins through Intraresidue 1Hâ^'15Nâ^'13Câ€˜ Dipoleâ^'CSA Relaxation Interference:â€‰ Facile Discrimination between Type-I and Type-II Î²-Turns. Journal of the American Chemical Society, 2000, 122, 12033-12034.	6.6	21
70	Relative Orientation of Peptide Planes in Proteins Is Reflected in Carbonylâ^'Carbonyl Chemical Shift Anisotropy Cross-Correlated Spin Relaxation. Journal of the American Chemical Society, 2000, 122, 7059-7071.	6.6	21
71	NMR Techniques to Study Hydrogen Bondingin Aqueous Solution. Monatshefte FÃ¼r Chemie, 1999, 130, 961-982.	0.9	15
72	A 4D TROSY-based pulse scheme for correlating 1HNi,15Ni,13Calphai,13C'i-1 chemical shifts in high molecular weight, 15N,13C, 2H labeled proteins. Journal of Biomolecular NMR, 1999, 15, 309-313.	1.6	49

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73	Heteronuclear relaxation in time-dependent spin systems: (15)N-T1 (rho) dispersion during adiabatic fast passage. Journal of Biomolecular NMR, 1999, 13, 213-221.	1.6	11
74	Structure and dynamics of the B12-binding subunit of glutamate mutase from Clostridium cochlearium. FEBS Journal, 1999, 263, 178-188.	0.2	29
75	The Structure of Methylcob(III)alamin in Aqueous Solution - A Water Molecule as Structuring Element of the Nucleotide Loop. Helvetica Chimica Acta, 1999, 82, 1596-1609.	1.0	21
76	Relaxation-Induced Polarization Transfer and the Determination of Methyl Group 13C Chemical Shielding Anisotropy. Journal of Physical Chemistry A, 1999, 103, 5253-5258.	1.1	0
77	Structure and Intramodular Dynamics of the Amino-Terminal LIM Domain from Quail Cysteine- and Glycine-Rich Protein CRP2â€,â€¡. Biochemistry, 1998, 37, 7127-7134.	1.2	34
78	A Multidimensional NMR Experiment for Measurement of the Protein Dihedral Angle Ï^ Based on Cross-Correlated Relaxation between1HÎ±â^'13CÎ±Dipolar and13Câ€˜ (Carbonyl) Chemical Shift Anisotropy Mechanisms. Journal of the American Chemical Society, 1997, 119, 11938-11940.	6.6	100
79	Pulse schemes for the measurement of 3JC'C gamma and 3JNC gamma scalar couplings in 15N,13C uniformly labeled proteins. Journal of Biomolecular NMR, 1997, 9, 409-422.	1.6	34
80	An (H)C(CO)NH-TOCSY pulse scheme for sequential assignment of protonated methyl groups in otherwise deuterated 15N, 13C-labeled proteins. Journal of Biomolecular NMR, 1996, 8, 351-356.	1.6	85