Robert Konrat

List of Publications by Year in Descending Order

82 papers	1,566 citations	21 h-index	37 g-index
91 ext. papers	1,846 ext. citations	5 avg, IF	4.93 L-index

#	Paper	IF	Citations
82	Long-range structural preformation in yes-associated protein precedes encounter complex formation with TEAD.. *IScience*, **2022**, 25, 104099	6.1	0
81	Membrane Interactions of α-Synuclein Revealed by Multiscale Molecular Dynamics Simulations, Markov State Models, and NMR. *Journal of Physical Chemistry B*, **2021**, 125, 2929-2941	3.4	1
80	Molecular basis of F-actin regulation and sarcomere assembly via myotilin. *PLoS Biology*, **2021**, 19, e3001148	9.8	3
79	Hyperphosphorylation of Human Osteopontin and Its Impact on Structural Dynamics and Molecular Recognition. *Biochemistry*, **2021**, 60, 1347-1355	3.2	2
78	Binding Mode Characterization of Osteopontin on Hydroxyapatite by Solution NMR Spectroscopy. *ChemBioChem*, **2021**, 22, 2300-2305	3.8	2
77	Cosolute modulation of protein oligomerization reactions in the homeostatic timescale. *Biophysical Journal*, **2021**, 120, 2067-2077	2.9	1
76	Order from disorder in the sarcomere: FATZ forms a fuzzy but tight complex and phase-separated condensates with α-actinin. *Science Advances*, **2021**, 7,	14.3	1
75	On-Cell NMR Contributions to Membrane Receptor Binding Characterization. *ChemPlusChem*, **2021**, 86, 938-945	2.8	1
74	Temperature as an Extra Dimension in Multidimensional Protein NMR Spectroscopy. *Chemistry - A European Journal*, **2021**, 27, 1753-1767	4.8	1
73	Using Cross-Correlated Spin Relaxation to Characterize Backbone Dihedral Angle Distributions of Flexible Protein Segments. *ChemPhysChem*, **2021**, 22, 18-28	3.2	3
72	Detecting anisotropic segmental dynamics in disordered proteins by cross-correlated spin relaxation. *Magnetic Resonance*, **2021**, 2, 557-569	2.9	1
71	A Step toward NRF2-DNA Interaction Inhibitors by Fragment-Based NMR Methods. *ChemMedChem*, **2021**, 16, 3576-3587	3.7	0
70	PI by NMR: Probing CH-π Interactions in Protein-Ligand Complexes by NMR Spectroscopy. *Angewandte Chemie - International Edition*, **2020**, 59, 14861-14868	16.4	11
69	Sensitivity-enhanced three-dimensional and carbon-detected two-dimensional NMR of proteins using hyperpolarized water. *Journal of Biomolecular NMR*, **2020**, 74, 161-171	3	2
68	A novel high-dimensional NMR experiment for resolving protein backbone dihedral angle ambiguities. *Journal of Biomolecular NMR*, **2020**, 74, 257-265	3	3
67	PI by NMR: Probing CH-π Interactions in Protein-Ligand Complexes by NMR Spectroscopy. *Angewandte Chemie*, **2020**, 132, 14971-14978	3.6	5
66	NMR Characterization of Surface Receptor Protein Interactions in Live Cells Using Methylcellulose Hydrogels. *Angewandte Chemie - International Edition*, **2020**, 59, 3886-3890	16.4	8

65	NMR Characterization of Surface Receptor Protein Interactions in Live Cells Using Methylcellulose Hydrogels. *Angewandte Chemie*, **2020**, 132, 3914-3918	3.6	3
64	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	6.5	35
63	Osteopontin regulates biomimetic calcium phosphate crystallization from disordered mineral layers covering apatite crystallites. *Scientific Reports*, **2020**, 10, 15722	4.9	11
62	Titelbild: PI by NMR: Probing CH Interactions in Protein Ligand Complexes by NMR Spectroscopy (Angew. Chem. 35/2020). *Angewandte Chemie*, **2020**, 132, 14805-14805	3.6	0
61	F NMR Spectroscopy Tagging and Paramagnetic Relaxation Enhancement-Based Conformation Analysis of Intrinsically Disordered Protein Complexes. *ChemBioChem*, **2020**, 21, 696-701	3.8	8
60	Binding of the protein ICln to Integrin contributes to the activation of ICl current. *Scientific Reports*, **2019**, 9, 12195	4.9	2
59	NMR Characterization of Long-Range Contacts in Intrinsically Disordered Proteins from Paramagnetic Relaxation Enhancement in C Direct-Detection Experiments. *ChemBioChem*, **2019**, 20, 335-339	3.8	17
58	H, N, C resonance assignment of the human CD44 cytoplasmic tail (669-742). *Biomolecular NMR Assignments*, **2019**, 13, 109-113	0.7	
57	H, C, N resonance assignment of human YAP 50-171 fragment. *Biomolecular NMR Assignments*, **2018**, 12, 179-182	0.7	6
56	Modulation of Correlated Segment Fluctuations in IDPs upon Complex Formation as an Allosteric Regulatory Mechanism. *Journal of Molecular Biology*, **2018**, 430, 2439-2452	6.5	18
55	Selective targeting of 3 repeat Tau with brain penetrating single chain antibodies for the treatment of neurodegenerative disorders. *Acta Neuropathologica*, **2018**, 136, 69-87	14.3	16
54	F multiple-quantum coherence NMR spectroscopy for probing protein-ligand interactions.. *RSC Advances*, **2018**, 8, 40687-40692	3.7	1
53	Late metabolic precursors for selective aromatic residue labeling. *Journal of Biomolecular NMR*, **2018**, 71, 129-140	3	7
52	Highly Selective Stable Isotope Labeling of Histidine Residues by Using a Novel Precursor in E. coli-Based Overexpression Systems. *ChemBioChem*, **2017**, 18, 1487-1491	3.8	6
51	Investigation of Intrinsically Disordered Proteins through Exchange with Hyperpolarized Water. *Angewandte Chemie - International Edition*, **2017**, 56, 389-392	16.4	36
50	NMR probing and visualization of correlated structural fluctuations in intrinsically disordered proteins. *Physical Chemistry Chemical Physics*, **2017**, 19, 10651-10656	3.6	14
49	Anthranilic acid, the new player in the ensemble of aromatic residue labeling precursor compounds. *Journal of Biomolecular NMR*, **2017**, 69, 13-22	3	7
48	Direct NMR Probing of Hydration Shells of Protein Ligand Interfaces and Its Application to Drug Design. *Journal of Medicinal Chemistry*, **2017**, 60, 8708-8715	8.3	22

47	A histone-mimicking interdomain linker in a multidomain protein modulates multivalent histone binding. *Journal of Biological Chemistry*, **2017**, 292, 17643-17657	5.4	11
46	Untersuchung von intrinsisch unstrukturierten Proteinen mithilfe des Austausches mit hyperpolarisiertem Wasser. *Angewandte Chemie*, **2017**, 129, 397-401	3.6	5
45	Calcium-dependent binding of Myc to calmodulin. *Oncotarget*, **2017**, 8, 3327-3343	3.3	12
44	Excited States of Nucleic Acids Probed by Proton Relaxation Dispersion NMR Spectroscopy. *Angewandte Chemie*, **2016**, 128, 12187-12191	3.6	7
43	Excited States of Nucleic Acids Probed by Proton Relaxation Dispersion NMR Spectroscopy. *Angewandte Chemie - International Edition*, **2016**, 55, 12008-12	16.4	39
42	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	3	7
41	1H, 15N, 13C resonance assignment of human GAP-43. *Biomolecular NMR Assignments*, **2016**, 10, 171-4	0.7	7
40	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, 2917-30	5.4	25
39	N-Lauroylation during the Expression of Recombinant N-Myristoylated Proteins: Implications and Solutions. *ChemBioChem*, **2016**, 17, 82-9	3.8	3
38	(1)H, (15)N, (13)C resonance assignment of human osteopontin. *Biomolecular NMR Assignments*, **2015**, 9, 289-92	0.7	5
37	NMR Spectroscopic Studies of the Conformational Ensembles of Intrinsically Disordered Proteins. *Advances in Experimental Medicine and Biology*, **2015**, 870, 149-85	3.6	15
36	IDPs: Less Disordered and More Ordered than Expected. *Biophysical Journal*, **2015**, 109, 1309-11	2.9	4
35	Strategies for purifying variants of human rhinovirus 14 2C protein. *Protein Expression and Purification*, **2014**, 95, 28-37	2	2
34	Compensatory adaptations of structural dynamics in an intrinsically disordered protein complex. *Angewandte Chemie - International Edition*, **2014**, 53, 3840-3	16.4	43
33	NMR contributions to structural dynamics studies of intrinsically disordered proteins. *Journal of Magnetic Resonance*, **2014**, 241, 74-85	3	122
32	Kompensatorische Anpassungen der strukturellen Dynamik eines intrinsisch unstrukturierten Protein-Komplexes. *Angewandte Chemie*, **2014**, 126, 3919-3922	3.6	10
31	Cooperative unfolding of compact conformations of the intrinsically disordered protein osteopontin. *Biochemistry*, **2013**, 52, 5167-75	3.2	61
30	□Ketoacids as precursors for phenylalanine and tyrosine labelling in cell-based protein overexpression. *Journal of Biomolecular NMR*, **2013**, 57, 327-31	3	27

29	BEST-TROSY experiments for time-efficient sequential resonance assignment of large disordered proteins. *Journal of Biomolecular NMR*, **2013**, 55, 311-21	3	141
28	Probing Local Backbone Geometries in Intrinsically Disordered Proteins by Cross-Correlated NMR Relaxation. *Angewandte Chemie*, **2013**, 125, 4702-4704	3.6	
27	Meta-structure correlation in protein space unveils different selection rules for folded and intrinsically disordered proteins. *Molecular BioSystems*, **2012**, 8, 411-6		11
26	The metastasis-associated extracellular matrix protein osteopontin forms transient structure in ligand interaction sites. *Biochemistry*, **2011**, 50, 6113-24	3.2	56
25	The meandering of disordered proteins in conformational space. *Structure*, **2010**, 18, 416-9	5.2	13
24	The protein meta-structure: a novel concept for chemical and molecular biology. *Cellular and Molecular Life Sciences*, **2009**, 66, 3625-39	10.3	41
23	Backbone assignment of osteopontin, a cytokine and cell attachment protein implicated in tumorigenesis. *Biomolecular NMR Assignments*, **2008**, 2, 29-31	0.7	9
22	New NMR Structural and Dynamical Probes of Organometallic B12 Derivatives **2007**, 349-368		3
21	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, 361-2	3	6
20	Automated NMR determination of protein backbone dihedral angles from cross-correlated spin relaxation. *Journal of Biomolecular NMR*, **2002**, 22, 349-63	3	30
19	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	3	15
18	Simultaneous measurement of intra- and intermolecular NOEs in differentially labeled protein-ligand complexes. *Journal of Biomolecular NMR*, **2001**, 21, 107-16	3	19
17	Structure, function, and dynamics of the dimerization and DNA-binding domain of oncogenic transcription factor v-Myc. *Journal of Molecular Biology*, **2001**, 307, 1395-410	6.5	83
16	Differential multiple-quantum relaxation arising from cross-correlated time-modulation of isotropic chemical shifts. *Journal of Biomolecular NMR*, **2000**, 18, 33-42	3	71
15	Sequence-specific resonance assignments of Q83, a lipocalin highly expressed in v-myc-transformed avian fibroblasts. *Journal of Biomolecular NMR*, **2000**, 17, 177-8	3	4
14	Measurement of the protein backbone dihedral angle phi based on quantification of remote CSA/DD interference in inter-residue 13CT(i - 1)-13Calpha(i) multiple-quantum coherences. *Journal of Biomolecular NMR*, **2000**, 17, 265-8	3	21
13	Peptide Plane Torsion Angles in Proteins through Intraresidue 1H□15N□13CD Dipole□CSA Relaxation Interference: Facile Discrimination between Type-I and Type-II □Turns. *Journal of the American Chemical Society*, **2000**, 122, 12033-12034	16.4	17
12	Relative Orientation of Peptide Planes in Proteins Is Reflected in Carbonyl□Carbonyl Chemical Shift Anisotropy Cross-Correlated Spin Relaxation. *Journal of the American Chemical Society*, **2000**, 122, 7059-7071	16.4	19

11	NMR Techniques to Study Hydrogen Bondingin Aqueous Solution. *Monatshefte Fü Chemie*, **1999**, 130, 961-982	1.4	12
10	A 4D TROSY-based pulse scheme for correlating 1HNi,15Ni,13Calphai,13CT-1 chemical shifts in high molecular weight, 15N,13C, 2H labeled proteins. *Journal of Biomolecular NMR*, **1999**, 15, 309-13	3	44
9	Heteronuclear relaxation in time-dependent spin systems: (15)N-T1 (rho) dispersion during adiabatic fast passage. *Journal of Biomolecular NMR*, **1999**, 13, 213-21	3	11
8	Structure and dynamics of the B12-binding subunit of glutamate mutase from Clostridium cochlearium. *FEBS Journal*, **1999**, 263, 178-88		23
7	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	2	17
6	Relaxation-Induced Polarization Transfer and the Determination of Methyl Group 13C Chemical Shielding Anisotropy. *Journal of Physical Chemistry A*, **1999**, 103, 5253-5258	2.8	
5	Structure and intramodular dynamics of the amino-terminal LIM domain from quail cysteine- and glycine-rich protein CRP2. *Biochemistry*, **1998**, 37, 7127-34	3.2	29
4	A Multidimensional NMR Experiment for Measurement of the Protein Dihedral Angle Based on Cross-Correlated Relaxation between 1H 3C Dipolar and 13C (Carbonyl) Chemical Shift Anisotropy Mechanisms. *Journal of the American Chemical Society*, **1997**, 119, 11938-11940	16.4	91
3	Pulse schemes for the measurement of 3JCC gamma and 3JNC gamma scalar couplings in 15N,13C uniformly labeled proteins. *Journal of Biomolecular NMR*, **1997**, 9, 409-22	3	32
2	An (H)C(CO)NH-TOCSY pulse scheme for sequential assignment of protonated methyl groups in otherwise deuterated (15)N, (13)C-labeled proteins. *Journal of Biomolecular NMR*, **1996**, 8, 351-6	3	85
1	The Anti-histamine Azelastine, Identified by Computational Drug Repurposing, Inhibits SARS-CoV-2 Infection in Reconstituted Human Nasal Tissue In Vitro		3