Mark Rance

List of Publications by Year in Descending Order

30 papers	1,793 citations	15 h-index	31 g-index
31 ext. papers	1,902 ext. citations	5.6 avg, IF	4.19 L-index

#	Paper	IF	Citations
30	Compact expressions for R relaxation for N-site chemical exchange using Schur decomposition. *Journal of Magnetic Resonance*, **2020**, 313, 106705	3	0
29	Algebraic expressions for Carr-Purcell-Meiboom-Gill relaxation dispersion for N-site chemical exchange. *Journal of Magnetic Resonance*, **2020**, 321, 106846	3	1
28	Effect of monovalent ion binding on molecular dynamics of the S100-family calcium-binding protein calbindin D. *Journal of Computational Chemistry*, **2019**, 40, 1936-1945	3.5	1
27	Defining a Canonical Ligand-Binding Pocket in the Orphan Nuclear Receptor Nurr1. *Structure*, **2019**, 27, 66-77.e5	5.2	26
26	Lysine Side-Chain Dynamics in the Binding Site of Homeodomain/DNA Complexes As Observed by NMR Relaxation Experiments and Molecular Dynamics Simulations. *Biochemistry*, **2018**, 57, 2796-2813	3.2	10
25	Enhanced spectral density mapping through combined multiple-field deuterium CHD methyl spin relaxation NMR spectroscopy. *Methods*, **2018**, 138-139, 76-84	4.6	9
24	General Expressions for Carr-Purcell-Meiboom-Gill Relaxation Dispersion for N-Site Chemical Exchange. *Biochemistry*, **2018**, 57, 4753-4763	3.2	11
23	Exploring a New Approach for Discovery of Conformational Heterogeneity in Homeodomain-DNA Complexes. *Biochemistry*, **2017**, 56, 5033-5034	3.2	
22	General expressions for R relaxation for N-site chemical exchange and the special case of linear chains. *Journal of Magnetic Resonance*, **2017**, 274, 36-45	3	22
21	Structural mechanism for signal transduction in RXR nuclear receptor heterodimers. *Nature Communications*, **2015**, 6, 8013	17.4	84
20	Targeting substrate-site in Jak2 kinase prevents emergence of genetic resistance. *Scientific Reports* , **2015**, 5, 14538	4.9	24
19	Rotation operator propagators for time-varying radiofrequency pulses in NMR spectroscopy: applications to shaped pulses and pulse trains. *Journal of Magnetic Resonance*, **2014**, 248, 105-14	3	4
18	The N-terminal basolateral targeting signal unlikely acts alone in the differential trafficking of membrane transporters in MDCK cells. *Biochemistry*, **2013**, 52, 5103-5116	3.2	7
17	Structural and biophysical insights into the ligand-free Pitx2 homeodomain and a ring dermoid of the cornea inducing homeodomain mutant. *Biochemistry*, **2012**, 51, 665-76	3.2	7
16	□H, □□C and □N chemical shift assignments for the human Pitx2 homeodomain in complex with a 22-base hairpin DNA. *Biomolecular NMR Assignments*, **2012**, 6, 79-81	0.7	
15	1H, 13C and 15N chemical shift assignments for the human Pitx2 homeodomain and a R24H homeodomain mutant. *Biomolecular NMR Assignments*, **2011**, 5, 105-7	0.7	4
14	Protein side-chain dynamics and residual conformational entropy. *Journal of the American Chemical Society*, **2009**, 131, 615-22	16.4	102

13	Toward quantitative interpretation of methyl side-chain dynamics from NMR by molecular dynamics simulations. *Journal of the American Chemical Society*, **2007**, 129, 14146-7	16.4	64
12	Temperature dependence of the NMR generalized order parameter. *Proteins: Structure, Function and Bioinformatics*, **2007**, 66, 796-803	4.2	11
11	The solution structure of the native K50 Bicoid homeodomain bound to the consensus TAATCC DNA-binding site. *Journal of Molecular Biology*, **2006**, 356, 1137-51	6.5	38
10	Effects of calcium binding on the side-chain methyl dynamics of calbindin D9k: a 2H NMR relaxation study. *Journal of Molecular Biology*, **2006**, 357, 1237-52	6.5	19
9	Solution structure of the K50 class homeodomain PITX2 bound to DNA and implications for mutations that cause Rieger syndrome. *Biochemistry*, **2005**, 44, 7497-511	3.2	42
8	A Metabolic Activation Mechanism of 7 H -Dibenzo[c,g]carbazole Via o -Quinone. Part 1: Synthesis of 7 H -Dibenzo[c,g]carbazole-3,4-dione and Reactions with Nucleophiles. *Polycyclic Aromatic Compounds*, **2002**, 22, 295-300	1.3	4
7	Site-site communication in the EF-hand Ca2+-binding protein calbindin D9k. *Nature Structural Biology*, **2000**, 7, 245-50		74
6	Variability of the 15N Chemical Shift Anisotropy in Escherichia coli Ribonuclease H in Solution. *Journal of the American Chemical Society*, **1999**, 121, 10119-10125	16.4	126
5	A TROSY CPMG sequence for characterizing chemical exchange in large proteins. *Journal of Biomolecular NMR*, **1999**, 15, 151-5	3	199
4	NMR analysis of cardiac troponin C-troponin I complexes: effects of phosphorylation. *FEBS Letters*, **1999**, 453, 107-12	3.8	82
3	Rotational diffusion anisotropy of proteins from simultaneous analysis of 15N and 13C alpha nuclear spin relaxation. *Journal of Biomolecular NMR*, **1997**, 9, 287-98	3	246
2	Intramolecular motions of a zinc finger DNA-binding domain from Xfin characterized by proton-detected natural abundance carbon-13 heteronuclear NMR spectroscopy. *Journal of the American Chemical Society*, **1991**, 113, 4371-4380	16.4	575
1	A Metabolic Activation Mechanism of 7 H -Dibenzo[c,g]carbazole Via o -Quinone. Part 1: Synthesis of 7 H -Dibenzo[c,g]carbazole-3,4-dione and Reactions with Nucleophiles		1