Christopher A Waudby

List of Publications by Year in descending order

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53 papers 4,294 citations

236925 25 h-index 197818 49 g-index

64 all docs

64 docs citations

64 times ranked 5854 citing authors

#	Article	IF	CITATIONS
1	An Analytical Solution to the Kinetics of Breakable Filament Assembly. Science, 2009, 326, 1533-1537.	12.6	970
2	Atomic structure and hierarchical assembly of a cross- \hat{l}^2 amyloid fibril. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 5468-5473.	7.1	479
3	Mechanosensitive Self-Replication Driven by Self-Organization. Science, 2010, 327, 1502-1506.	12.6	465
4	Metastability of Native Proteins and the Phenomenon of Amyloid Formation. Journal of the American Chemical Society, 2011, 133, 14160-14163.	13.7	369
5	Structure and Properties of a Complex of α-Synuclein and a Single-Domain Camelid Antibody. Journal of Molecular Biology, 2010, 402, 326-343.	4.2	164
6	Two-Dimensional NMR Lineshape Analysis. Scientific Reports, 2016, 6, 24826.	3.3	161
7	Binding of the Molecular Chaperone $\hat{l}\pm B$ -Crystallin to A \hat{l}^2 Amyloid Fibrils Inhibits Fibril Elongation. Biophysical Journal, 2011, 101, 1681-1689.	0.5	143
8	The Interaction of αB-Crystallin with Mature α-Synuclein Amyloid Fibrils Inhibits Their Elongation. Biophysical Journal, 2010, 98, 843-851.	0.5	136
9	A structural ensemble of a ribosome–nascent chain complex during cotranslational protein folding. Nature Structural and Molecular Biology, 2016, 23, 278-285.	8.2	135
10	Hsp90 Inhibits α-Synuclein Aggregation by Interacting with Soluble Oligomers. Journal of Molecular Biology, 2013, 425, 4614-4628.	4.2	104
11	Nature and Regulation of Protein Folding on the Ribosome. Trends in Biochemical Sciences, 2019, 44, 914-926.	7.5	97
12	Glial Innate Immunity Generated by Non-Aggregated Alpha-Synuclein in Mouse: Differences between Wild-type and Parkinson's Disease-Linked Mutants. PLoS ONE, 2010, 5, e13481.	2.5	89
13	In-Cell NMR Characterization of the Secondary Structure Populations of a Disordered Conformation of α-Synuclein within E. coli Cells. PLoS ONE, 2013, 8, e72286.	2.5	89
14	On the Mechanism of Nonspecific Inhibitors of Protein Aggregation: Dissecting the Interactions of α-Synuclein with Congo Red and Lacmoid. Biochemistry, 2009, 48, 8322-8334.	2.5	88
15	Inversion of the Balance between Hydrophobic and Hydrogen Bonding Interactions in Protein Folding and Aggregation. PLoS Computational Biology, 2011, 7, e1002169.	3.2	86
16	The H50Q Mutation Induces a 10-fold Decrease in the Solubility of α-Synuclein. Journal of Biological Chemistry, 2015, 290, 2395-2404.	3.4	65
17	Structural characterization of the interaction of \hat{l}_{\pm} -synuclein nascent chains with the ribosomal surface and trigger factor. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 5012-5017.	7.1	54
18	D25V apolipoprotein C-III variant causes dominant hereditary systemic amyloidosis and confers cardiovascular protective lipoprotein profile. Nature Communications, 2016, 7, 10353.	12.8	50

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19	Positionâ€Dependent Electrostatic Protection against Protein Aggregation. ChemBioChem, 2009, 10, 1309-1312.	2.6	47
20	A strategy for co-translational folding studies of ribosome-bound nascent chain complexes using NMR spectroscopy. Nature Protocols, 2016, 11, 1492-1507.	12.0	39
21	Systematic mapping of free energy landscapes of a growing filamin domain during biosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 9744-9749.	7.1	39
22	Rapid Distinction of Intracellular and Extracellular Proteins Using NMR Diffusion Measurements. Journal of the American Chemical Society, 2012, 134, 11312-11315.	13.7	35
23	Protein folding on the ribosome studied using NMR spectroscopy. Progress in Nuclear Magnetic Resonance Spectroscopy, 2013, 74, 57-75.	7.5	35
24	Rapid Quantification of Protein-Ligand Binding via 19F NMR Lineshape Analysis. Biophysical Journal, 2020, 118, 2537-2548.	0.5	34
25	Structural Dynamics Associated with Intermediate Formation in an Archetypal Conformational Disease. Structure, 2012, 20, 504-512.	3.3	33
26	Interactions between nascent proteins and the ribosome surface inhibit co-translational folding. Nature Chemistry, 2021, 13, 1214-1220.	13.6	27
27	Binding of Monovalent and Bivalent Ligands by Transthyretin Causes Different Short- and Long-Distance Conformational Changes. Journal of Medicinal Chemistry, 2019, 62, 8274-8283.	6.4	25
28	Nascent chains can form co-translational folding intermediates that promote post-translational folding outcomes in a disease-causing protein. Nature Communications, 2021, 12, 6447.	12.8	22
29	Chemical documents: machine understanding and automated information extraction. Organic and Biomolecular Chemistry, 2004, 2, 3294.	2.8	21
30	An analysis of NMR sensitivity enhancements obtained using non-uniform weighted sampling, and the application to protein NMR. Journal of Magnetic Resonance, 2012, 219, 46-52.	2.1	21
31	GPU accelerated Monte Carlo simulation of pulsed-field gradient NMR experiments. Journal of Magnetic Resonance, 2011, 211, 67-73.	2.1	18
32	From Selection to Instruction and Back: Competing Conformational Selection and Induced Fit Pathways in Abiotic Hosts. Angewandte Chemie - International Edition, 2021, 60, 19942-19948.	13.8	18
33	Two-dimensional NMR lineshape analysis of single, multiple, zero and double quantum correlation experiments. Journal of Biomolecular NMR, 2020, 74, 95-109.	2.8	15
34	High-resolution ex vivo NMR spectroscopy of human Z $\hat{l}\pm 1$ -antitrypsin. Nature Communications, 2020, 11, 6371.	12.8	15
35	Common sequence motifs of nascent chains engage the ribosome surface and trigger factor. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	13
36	Optimal design of adaptively sampled NMR experiments for measurement of methyl group dynamics with application to a ribosome-nascent chain complex. Journal of Magnetic Resonance, 2021, 326, 106937.	2.1	12

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37	Increasing the sensitivity of NMR diffusion measurements by paramagnetic longitudinal relaxation enhancement, with application to ribosome–nascent chain complexes. Journal of Biomolecular NMR, 2015, 63, 151-163.	2.8	10
38	Probing the dynamic stalk region of the ribosome using solution NMR. Scientific Reports, 2019, 9, 13528.	3.3	10
39	Crossâ€Peaks in Simple Twoâ€Dimensional NMR Experiments from Chemical Exchange of Transverse Magnetisation. Angewandte Chemie - International Edition, 2019, 58, 8784-8788.	13.8	10
40	Thermodynamics of co-translational folding and ribosome–nascent chain interactions. Current Opinion in Structural Biology, 2022, 74, 102357.	5.7	9
41	Nascent chain dynamics and ribosome interactions within folded ribosome–nascent chain complexes observed by NMR spectroscopy. Chemical Science, 2021, 12, 13120-13126.	7.4	8
42	NMR Lineshape Analysis of Intrinsically Disordered Protein Interactions. Methods in Molecular Biology, 2020, 2141, 477-504.	0.9	8
43	Application of Lysine-specific Labeling to Detect Transient Interactions Present During Human Lysozyme Amyloid Fibril Formation. Scientific Reports, 2017, 7, 15018.	3.3	6
44	Dynamics of Ligand Binding to a Rigid Glycosidase**. Angewandte Chemie - International Edition, 2020, 59, 20508-20514.	13.8	4
45	From Selection to Instruction and Back: Competing Conformational Selection and Induced Fit Pathways in Abiotic Hosts. Angewandte Chemie, 2021, 133, 20095-20101.	2.0	4
46	Distinct dissociation rates of murine and human norovirus P-domain dimers suggest a role of dimer stability in virus-host interactions. Communications Biology, 2022, 5, .	4.4	4
47	Crossâ€Peaks in Simple Twoâ€Dimensional NMR Experiments from Chemical Exchange of Transverse Magnetisation. Angewandte Chemie, 2019, 131, 8876-8880.	2.0	2
48	Solution-State Nuclear Magnetic Resonance Spectroscopy and Protein Folding. Methods in Molecular Biology, 2011, 752, 97-120.	0.9	2
49	Analysis of conformational exchange processes using methyl-TROSY-based Hahn echo measurements of quadruple-quantum relaxation. Magnetic Resonance, 2021, 2, 777-793.	1.9	1
50	Structural Investigation of an Immunoglobulin Domain on the Ribosome using NMR Spectroscopy. Biophysical Journal, 2017, 112, 41a.	0.5	0
51	Structures and Dynamics of Protein Folding on the Ribosome by NMR Spectroscopy. Biophysical Journal, 2018, 114, 414a.	0.5	O
52	Dynamics of Ligand Binding to a Rigid Glycosidase**. Angewandte Chemie, 2020, 132, 20689-20695.	2.0	0
53	Structural investigation of the folding of an immunoglobulin domain on the ribosome using NMR Spectroscopy (LB197). FASEB Journal, 2014, 28, LB197.	0.5	O