Andrew J Baldwin

List of Publications by Year
in descending order

64	7,773	109137 35	118652 62
papers	citations	h-index	g-index

76	76	76	9505
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Quantitative chemical exchange saturation transfer imaging of nuclear overhauser effects in acute ischemic stroke. Magnetic Resonance in Medicine, 2022, , .	1.9	2
2	Reductive site-selective atypical C , Z -type/N2-C2 cleavage allows C-terminal protein amidation. Science Advances, 2022, 8, eabl8675.	4.7	1
3	Pathogen-sugar interactions revealed by universal saturation transfer analysis. Science, 2022, 377, .	6.0	24
4	Cell-permeable lanthanideâ€“platinum(<scp>iv</scp>) anti-cancer prodrugs. Dalton Transactions, 2021, 50, 8761-8767.	1.6	6
5	Fast Molecular Compression by a Hyperthermal Collision Gives Bond-Selective Mechanochemistry. Physical Review Letters, 2021, 126, 056001.	2.9	22
6	A weakened interface in the P182L variant of HSP27 associated with severe Charcotâ€Marieâ€Tooth neuropathy causes aberrant binding to interacting proteins. EMBO Journal, 2021, 40, e103811.	3.5	14
7	Post-translational insertion of boron in proteins to probe and modulate function. Nature Chemical Biology, 2021, 17, 1245-1261.	3.9	15
8	Light-driven post-translational installation of reactive protein side chains. Nature, 2020, 585, 530-537.	13.7	100
9	Conditional Disorder in Small Heat-shock Proteins. Journal of Molecular Biology, 2020, 432, 3033-3049.	2.0	21
10	Dynamic design: manipulation of millisecond timescale motions on the energy landscape of cyclophilin A. Chemical Science, 2020, 11, 2670-2680.	3.7	16
11	Local frustration determines loop opening during the catalytic cycle of an oxidoreductase. ELife, 2020, 9, .	2.8	13
12	INDIANA: An in-cell diffusion method to characterize the size, abundance and permeability of cells. Journal of Magnetic Resonance, 2019, 302, 1-13.	1.2	11
13	HspB1 phosphorylation regulates its intramolecular dynamics and mechanosensitive molecular chaperone interaction with filamin C. Science Advances, 2019, 5, eaav8421.	4.7	52
14	Local unfolding of the HSP27 monomer regulates chaperone activity. Nature Communications, 2019, 10, 1068.	5.8	93
15	Structural principles that enable oligomeric small heat-shock protein paralogs to evolve distinct functions. Science, 2018, 359, 930-935.	6.0	51
16	Selective Radical Trifluoromethylation of Native Residues in Proteins. Journal of the American Chemical Society, 2018, 140, 1568-1571.	6.6	102
17	Measuring Diffusion Constants of Invisible Protein Conformers by Tripleâ€Quantum ¹H CPMG Relaxation Dispersion. Angewandte Chemie - International Edition, 2018, 57, 16777-16780.	7.2	17
18	Measuring Diffusion Constants of Invisible Protein Conformers by Tripleâ€Quantum 1 H CPMG Relaxation Dispersion. Angewandte Chemie, 2018, 130, 17019-17022.	1.6	5

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19	Formation of a Secretion-Competent Protein Complex by a Dynamic Wrap-around Binding Mechanism. Journal of Molecular Biology, 2018, 430, 3157-3169.	2.0	5
20	The role of interfacial lipids in stabilizing membrane protein oligomers. Nature, 2017, 541, 421-424.	13.7	344
21	Proline isomerization in the C-terminal region of HSP27. Cell Stress and Chaperones, 2017, 22, 639-651.	1.2	24
22	Monitoring the Disassembly of Virus-like Particles by ¹⁹F-NMR. Journal of the American Chemical Society, 2017, 139, 5277-5280.	6.6	23
23	Accommodating Protein Dynamics in the Modeling of Chemical Crosslinks. Structure, 2017, 25, 1751-1757.e5.	1.6	36
24	Structural and hydrodynamic properties of an intrinsically disordered region of a germ cell-specific protein on phase separation. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E8194-E8203.	3.3	381
25	Automatic Assignment of Methyl-NMR Spectra of Supramolecular Machines Using Graph Theory. Journal of the American Chemical Society, 2017, 139, 9523-9533.	6.6	48
26	Determination of an optimally sensitive and specific chemical exchange saturation transfer MRI quantification metric in relevant biological phantoms. NMR in Biomedicine, 2016, 29, 1624-1633.	1.6	12
27	Membraneless organelles can melt nucleic acid duplexes and act as biomolecular filters. Nature Chemistry, 2016, 8, 569-575.	6.6	278
28	Harnessing NMR relaxation interference effects to characterise supramolecular assemblies. Chemical Communications, 2016, 52, 7450-7453.	2.2	6
29	Posttranslational mutagenesis: A chemical strategy for exploring protein side-chain diversity. Science, 2016, 354, .	6.0	247
30	Studying the Conformational Equilibrium of the N-Terminal Domain of Dsbd by NMR and Computer Simulation. Biophysical Journal, 2015, 108, 184a.	0.2	0
31	AB-Crystallin Binds to Titin Ig Domains and Increases Stiffness of Skinned Cardiac Trabeculae. Biophysical Journal, 2015, 108, 444a.	0.2	0
32	Phase Transition of a Disordered Nuage Protein Generates Environmentally Responsive Membraneless Organelles. Molecular Cell, 2015, 57, 936-947.	4.5	1,408
33	Combining tandem mass spectrometry with ion mobility separation to determine the architecture of polydisperse proteins. International Journal of Mass Spectrometry, 2015, 377, 663-671.	0.7	16
34	Investigating the Mechanisms of Amylolysis of Starch Granules by Solution-State NMR. Biomacromolecules, 2015, 16, 1614-1621.	2.6	44
35	Collision Cross Sections for Structural Proteomics. Structure, 2015, 23, 791-799.	1.6	231
36	Bayesian Deconvolution of Mass and Ion Mobility Spectra: From Binary Interactions to Polydisperse Ensembles. Analytical Chemistry, 2015, 87, 4370-4376.	3.2	663

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37	Quantifying the stabilizing effects of proteinâ€“ligand interactions in the gas phase. Nature Communications, 2015, 6, 8551.	5.8	136
38	The structured core domain of Î±B-crystallin can prevent amyloid fibrillation and associated toxicity. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E1562-70.	3.3	181
39	An exact solution for R2,eff in CPMG experiments in the case of two site chemical exchange. Journal of Magnetic Resonance, 2014, 244, 114-124.	1.2	42
40	Phase Separation of Disordered Protein in the Formation of Membrane-Less Organelles. Biophysical Journal, 2014, 106, 35a.	0.2	1
41	Membrane proteins bind lipids selectively to modulate their structure and function. Nature, 2014, 510, 172-175.	13.7	665
42	An R1Ï•expression for a spin in chemical exchange between two sites with unequal transverse relaxation rates. Journal of Biomolecular NMR, 2013, 55, 211-218.	1.6	32
43	C-terminal interactions mediate the quaternary dynamics of Î±B-crystallin. Philosophical Transactions of the Royal Society B: Biological Sciences, 2013, 368, 20110405.	1.8	70
44	Probing Dynamic Conformations of the High-Molecular-Weight Î±B-Crystallin Heat Shock Protein Ensemble by NMR Spectroscopy. Journal of the American Chemical Society, 2012, 134, 15343-15350.	6.6	63
45	Twisting Transition between Crystalline and Fibrillar Phases of Aggregated Peptides. Physical Review Letters, 2012, 109, 158101.	2.9	48
46	Small Heat-Shock Proteins: Paramedics of the Cell. Topics in Current Chemistry, 2012, 328, 69-98.	4.0	116
47	The Morphology of Decorated Amyloid Fibers is Controlled by the Conformation and Position of the Displayed Protein. ACS Nano, 2012, 6, 1332-1346.	7.3	19
48	Dynamic binding. Nature, 2012, 488, 165-166.	13.7	10
49	Measurement of the signs of methyl 13C chemical shift differences between interconverting ground and excited protein states by R 1Ï•: an application to Î±B-crystallin. Journal of Biomolecular NMR, 2012, 53, 1-12.	1.6	18
50	Dissecting Heterogeneous Molecular Chaperone Complexes Using a Mass Spectrum Deconvolution Approach. Chemistry and Biology, 2012, 19, 599-607.	6.2	70
51	Perturbation of the Stability of Amyloid Fibrils through Alteration of Electrostatic Interactions. Biophysical Journal, 2011, 100, 2783-2791.	0.2	121
52	Metastability of Native Proteins and the Phenomenon of Amyloid Formation. Journal of the American Chemical Society, 2011, 133, 14160-14163.	6.6	369
53	Î±B-Crystallin Polydispersity Is a Consequence of Unbiased Quaternary Dynamics. Journal of Molecular Biology, 2011, 413, 297-309.	2.0	122
54	Quaternary Dynamics of Î±B-Crystallin as a Direct Consequence of Localised Tertiary Fluctuations in the C-Terminus. Journal of Molecular Biology, 2011, 413, 310-320.	2.0	89

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55	The Polydispersity of Î±B-Crystallin Is Rationalized by an Interconverting Polyhedral Architecture. Structure, 2011, 19, 1855-1863.	1.6	116
56	The Quaternary Organization and Dynamics of the Molecular Chaperone HSP26 Are Thermally Regulated. Chemistry and Biology, 2010, 17, 1008-1017.	6.2	45
57	Quaternary dynamics and plasticity underlie small heat shock protein chaperone function. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 2007-2012.	3.3	231
58	¹³CHD₂ Methyl Group Probes of Millisecond Time Scale Exchange in Proteins by ¹H Relaxation Dispersion: An Application to Proteasome Gating Residue Dynamics. Journal of the American Chemical Society, 2010, 132, 10992-10995.	6.6	60
59	NMR spectroscopy brings invisible protein states into focus. Nature Chemical Biology, 2009, 5, 808-814.	3.9	403
60	Measurement of Methyl Axis Orientations in Invisible, Excited States of Proteins by Relaxation Dispersion NMR Spectroscopy. Journal of the American Chemical Society, 2009, 131, 11939-11948.	6.6	33
61	Measurement of Amyloid Fibril Length Distributions by Inclusion of Rotational Motion in Solution NMR Diffusion Measurements. Angewandte Chemie - International Edition, 2008, 47, 3385-3387.	7.2	47
62	Contribution of rotational diffusion to pulsed field gradient diffusion measurements. Journal of Chemical Physics, 2007, 127, 114505.	1.2	23
63	Characterisation of Amyloid Fibril Formation by Small Heat-shock Chaperone Proteins Human Î±A-, Î±B- and R120G Î±B-Crystallins. Journal of Molecular Biology, 2007, 372, 470-484.	2.0	93
64	Cytochrome Display on Amyloid Fibrils. Journal of the American Chemical Society, 2006, 128, 2162-2163.	6.6	146