James C A Bardwell

List of Publications by Year
in descending order

51 papers	2,108 citations	279798 23 h-index	243625 44 g-index
54 all docs	54 docs citations	54 times ranked	2712 citing authors

#	Article	IF	Citations
1	Polyphosphate Is a Primordial Chaperone. Molecular Cell, 2014, 53, 689-699.	9.7	291
2	Optimizing Protein Stability In Vivo. Molecular Cell, 2009, 36, 861-871.	9.7	147
3	Genetic selection designed to stabilize proteins uncovers a chaperone called Spy. Nature Structural and Molecular Biology, 2011, 18, 262-269.	8.2	138
4	Conditional disorder in chaperone action. Trends in Biochemical Sciences, 2012, 37, 517-525.	7.5	122
5	The origami of thioredoxin-like folds. Protein Science, 2006, 15, 2217-2227.	7.6	93
6	Flexible, symmetry-directed approach to assembling protein cages. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 8681-8686.	7.1	91
7	Protein refolding by pH-triggered chaperone binding and release. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 1071-1076.	7.1	89
8	Forces Driving Chaperone Action. Cell, 2016, 166, 369-379.	28.9	89
9	Structural analysis of three His32 mutants of DsbA: Support for an electrostatic role of His32 in DsbA stability. Protein Science, 1997, 6, 1893-1900.	7.6	82
10	The uncharged surface features surrounding the active site of<i>Escherichia coli</i>DsbA are conserved and are implicated in peptide binding. Protein Science, 1997, 6, 1148-1156.	7.6	78
11	Isolation of Bacteria Envelope Proteins. Methods in Molecular Biology, 2013, 966, 359-366.	0.9	77
12	Substrate protein folds while it is bound to the ATP-independent chaperone Spy. Nature Structural and Molecular Biology, 2016, 23, 53-58.	8.2	68
13	Visualizing chaperone-assisted protein folding. Nature Structural and Molecular Biology, 2016, 23, 691-697.	8.2	52
14	Protein unfolding as a switch from self-recognition to high-affinity client binding. Nature Communications, 2016, 7, 10357.	12.8	48
15	Determining crystal structures through crowdsourcing and coursework. Nature Communications, 2016, 7, 12549.	12.8	47
16	Symmetryâ€Directed Selfâ€Assembly of a Tetrahedral Protein Cage Mediated by de Novoâ€Designed Coiled Coils. ChemBioChem, 2017, 18, 1888-1892.	2.6	42
17	Folding while bound to chaperones. Current Opinion in Structural Biology, 2018, 48, 1-5.	5.7	42
18	RNAs as chaperones. RNA Biology, 2016, 13, 1228-1231.	3.1	35

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19	Directed evolution to improve protein folding in vivo. Current Opinion in Structural Biology, 2018, 48, 117-123.	5.7	32
20	<i>E. coli </i>chaperones DnaK, Hsp33 and Spy inhibit bacterial functional amyloid assembly. Prion, 2011, 5, 323-334.	1.8	31
21	Periplasmic Chaperones and Prolyl Isomerases. EcoSal Plus, 2018, 8, .	5.4	29
22	Protein folding while chaperone bound is dependent on weak interactions. Nature Communications, 2019, 10, 4833.	12.8	28
23	Polyphosphate drives bacterial heterochromatin formation. Science Advances, 2021, 7, eabk0233.	10.3	27
24	Folding Optimization In Vivo Uncovers New Chaperones. Journal of Molecular Biology, 2015, 427, 2983-2994.	4.2	26
25	Capturing a Dynamic Chaperoneâ€"Substrate Interaction Using NMR-Informed Molecular Modeling. Journal of the American Chemical Society, 2016, 138, 9826-9839.	13.7	25
26	SERF engages in a fuzzy complex that accelerates primary nucleation of amyloid proteins. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 23040-23049.	7.1	25
27	Evaluation of de novo-designed coiled coils as off-the-shelf components for protein assembly. Molecular Systems Design and Engineering, 2017, 2, 140-148.	3.4	22
28	The crystal structure of TrxA(CACA): Insights into the formation of a [2Fe-2S] iron-sulfur cluster in anEscherichia colithioredoxin mutant. Protein Science, 2005, 14, 1863-1869.	7.6	21
29	Mechanism of the small ATP-independent chaperone Spy is substrate specific. Nature Communications, 2021, 12, 851.	12.8	20
30	Engineered Pathways for Correct Disulfide Bond Oxidation. Antioxidants and Redox Signaling, 2011, 14, 2399-2412.	5.4	18
31	E. coli chaperones DnaK, Hsp33 and Spy inhibit bacterial functional amyloid assembly. Prion, 2011, 5, 323-334.	1.8	18
32	In vivo chloride concentrations surge to proteotoxic levels during acid stress. Nature Chemical Biology, 2018, 14, 1051-1058.	8.0	16
33	Chaperone OsmY facilitates the biogenesis of a major family of autotransporters. Molecular Microbiology, 2019, 112, 1373-1387.	2.5	16
34	ATP-Independent Chaperones. Annual Review of Biophysics, 2022, 51, 409-429.	10.0	16
35	Elaborating a coiledâ€coilâ€assembled octahedral protein cage with additional protein domains. Protein Science, 2018, 27, 1893-1900.	7.6	13
36	Cytosolic Selection Systems To Study Protein Stability. Journal of Bacteriology, 2014, 196, 4333-4343.	2.2	11

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37	A cytochrome c is the natural electron acceptor for nicotine oxidoreductase. Nature Chemical Biology, 2021, 17, 344-350.	8.0	11
38	Electrostatic interactions are important for chaperoneâ€“client interaction in vivo. Microbiology (United Kingdom), 2018, 164, 992-997.	1.8	11
39	Trigger factor both holds and folds its client proteins. Nature Communications, 2022, 13, .	12.8	8
40	Disulfides out of thin air. Nature Structural Biology, 2002, 9, 2-3.	9.7	6
41	Genetic Selection for Enhanced Folding<i>In Vivo</i>Targets the Cys14-Cys38 Disulfide Bond in Bovine Pancreatic Trypsin Inhibitor. Antioxidants and Redox Signaling, 2011, 14, 973-984.	5.4	6
42	A metabolite binding protein moonlights as a bileâ€responsive chaperone. EMBO Journal, 2020, 39, e104231.	7.8	6
43	<scp>SERF</scp>, a family of tiny highly conserved, highly charged proteins with enigmatic functions. FEBS Journal, 2023, 290, 4150-4162.	4.7	6
44	Selecting Conformational Ensembles Using Residual Electron and Anomalous Density (READ). Methods in Molecular Biology, 2018, 1764, 491-504.	0.9	5
45	Identifying dynamic, partially occupied residues using anomalous scattering. Acta Crystallographica Section D: Structural Biology, 2019, 75, 1084-1095.	2.3	5
46	Converting a Sulfenic Acid Reductase into a Disulfide Bond Isomerase. Antioxidants and Redox Signaling, 2015, 23, 945-957.	5.4	4
47	Yeast Tripartite Biosensors Sensitive to Protein Stability and Aggregation Propensity. ACS Chemical Biology, 2020, 15, 1078-1088.	3.4	4
48	Reply to â€˜Misreading chaperoneâ€“substrate complexes from random noiseâ€™. Nature Structural and Molecular Biology, 2018, 25, 990-991.	8.2	2
49	Folding against the wind. Nature Chemical Biology, 2018, 14, 329-330.	8.0	1
50	Microreactor equipped with naturally acid-resistant histidine ammonia lyase from an extremophile. Materials Advances, 2022, 3, 3649-3662.	5.4	1
51	Detection of the pH-dependent Activity of Escherichia coli Chaperone HdeB In Vitro and In Vivo. Journal of Visualized Experiments, 2016, , .	0.3	0