

List of Publications by Citations

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135
papers

13,078
citations

61
h-index

114
g-index

153
ext. papers

15,043
ext. citations

13.6
avg, IF

6.51
L-index

#	Paper	IF	Citations
135	Structure of 20S proteasome from yeast at 2.4 Å resolution. <i>Nature</i> , 1997 , 386, 463-71	50.4	1996
134	Crystal structure of the bacterial cell-division protein FtsZ. <i>Nature</i> , 1998 , 391, 203-6	50.4	730
133	Prokaryotic origin of the actin cytoskeleton. <i>Nature</i> , 2001 , 413, 39-44	50.4	646
132	Molecular architecture of SMC proteins and the yeast cohesin complex. <i>Molecular Cell</i> , 2002 , 9, 773-88	17.6	565
131	RF cloning: a restriction-free method for inserting target genes into plasmids. <i>Journal of Proteomics</i> , 2006 , 67, 67-74		402
130	Crystal structure of the thermosome, the archaeal chaperonin and homolog of CCT. <i>Cell</i> , 1998 , 93, 125-38	36.2	375
129	Crystal structure of dimethyl sulfoxide reductase from <i>Rhodobacter capsulatus</i> at 1.88 Å resolution. <i>Journal of Molecular Biology</i> , 1996 , 263, 53-69	6.5	248
128	Structure and stability of cohesin's Smc1-kleisin interaction. <i>Molecular Cell</i> , 2004 , 15, 951-64	17.6	246
127	Bacterial chromosome segregation: structure and DNA binding of the Soj dimer--a conserved biological switch. <i>EMBO Journal</i> , 2005 , 24, 270-82	13	233
126	Structural insights into FtsZ protofilament formation. <i>Nature Structural and Molecular Biology</i> , 2004 , 11, 1243-50	17.6	228
125	Prokaryotic DNA segregation by an actin-like filament. <i>EMBO Journal</i> , 2002 , 21, 3119-27	13	208
124	F-actin-like filaments formed by plasmid segregation protein ParM. <i>EMBO Journal</i> , 2002 , 21, 6935-43	13	208
123	Tubulin-like protofilaments in Ca ²⁺ -induced FtsZ sheets. <i>EMBO Journal</i> , 1999 , 18, 2364-71	13	197
122	How Taxol stabilises microtubule structure. <i>Chemistry and Biology</i> , 1999 , 6, R65-9		189
121	Closing the cohesin ring: structure and function of its Smc3-kleisin interface. <i>Science</i> , 2014 , 346, 963-7	33.3	188
120	Crystal structure of the SOS cell division inhibitor Sula and in complex with FtsZ. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003 , 100, 7889-94	11.5	187
119	Double-stranded DNA translocation: structure and mechanism of hexameric FtsK. <i>Molecular Cell</i> , 2006 , 23, 457-69	17.6	185

118	A bacterial dynamin-like protein. <i>Nature</i> , 2006 , 444, 766-9	50.4	182
117	Direct membrane binding by bacterial actin MreB. <i>Molecular Cell</i> , 2011 , 43, 478-87	17.6	181
116	FtsA forms actin-like protofilaments. <i>EMBO Journal</i> , 2012 , 31, 2249-60	13	173
115	Dynamic filaments of the bacterial cytoskeleton. <i>Annual Review of Biochemistry</i> , 2006 , 75, 467-92	29.1	169
114	Architecture of the ring formed by the tubulin homologue FtsZ in bacterial cell division. <i>ELife</i> , 2014 , 3, e04601	8.9	169
113	Advances in Single-Particle Electron Cryomicroscopy Structure Determination applied to Sub-tomogram Averaging. <i>Structure</i> , 2015 , 23, 1743-1753	5.2	142
112	Structure of a bacterial dynamin-like protein lipid tube provides a mechanism for assembly and membrane curving. <i>Cell</i> , 2009 , 139, 1342-52	56.2	136
111	Structural insights into the conformational variability of FtsZ. <i>Journal of Molecular Biology</i> , 2007 , 373, 1229-42	6.5	135
110	Crystal structure of the SMC head domain: an ABC ATPase with 900 residues antiparallel coiled-coil inserted. <i>Journal of Molecular Biology</i> , 2001 , 306, 25-35	6.5	132
109	Structure of bacterial tubulin BtubA/B: evidence for horizontal gene transfer. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005 , 102, 9170-5	11.5	124
108	Molecules of the bacterial cytoskeleton. <i>Annual Review of Biophysics and Biomolecular Structure</i> , 2004 , 33, 177-98		116
107	Bacterial actin MreB assembles in complex with cell shape protein RodZ. <i>EMBO Journal</i> , 2010 , 29, 1081-90	9.5	113
106	Bacterial actin MreB forms antiparallel double filaments. <i>ELife</i> , 2014 , 3, e02634	8.9	106
105	The crystal structure of ZapA and its modulation of FtsZ polymerisation. <i>Journal of Molecular Biology</i> , 2004 , 341, 839-52	6.5	105
104	Evolution of cytomotive filaments: the cytoskeleton from prokaryotes to eukaryotes. <i>International Journal of Biochemistry and Cell Biology</i> , 2009 , 41, 323-9	5.6	103
103	Structure of the Jab1/MPN domain and its implications for proteasome function. <i>Biochemistry</i> , 2003 , 42, 11460-5	3.2	100
102	The crystal structure of AF1521 a protein from <i>Archaeoglobus fulgidus</i> with homology to the non-histone domain of macroH2A. <i>Journal of Molecular Biology</i> , 2003 , 330, 503-11	6.5	97
101	Novel coiled-coil cell division factor ZapB stimulates Z ring assembly and cell division. <i>Molecular Microbiology</i> , 2008 , 68, 720-35	4.1	96

100	MreB filaments align along greatest principal membrane curvature to orient cell wall synthesis. <i>ELife</i> , 2018 , 7,	8.9	95
99	The ParMRC system: molecular mechanisms of plasmid segregation by actin-like filaments. <i>Nature Reviews Microbiology</i> , 2010 , 8, 683-92	22.2	94
98	Murein (peptidoglycan) binding property of the essential cell division protein FtsN from <i>Escherichia coli</i> . <i>Journal of Bacteriology</i> , 2004 , 186, 6728-37	3.5	92
97	Molecular mechanism of sequence-directed DNA loading and translocation by FtsK. <i>Molecular Cell</i> , 2008 , 31, 498-509	17.6	88
96	Features critical for membrane binding revealed by DivIVA crystal structure. <i>EMBO Journal</i> , 2010 , 29, 1988-2001	13	86
95	Electron cryomicroscopy of <i>E. coli</i> reveals filament bundles involved in plasmid DNA segregation. <i>Science</i> , 2009 , 323, 509-12	33.3	86
94	Structural analysis of the chromosome segregation protein Spo0J from <i>Thermus thermophilus</i> . <i>Molecular Microbiology</i> , 2004 , 53, 419-32	4.1	84
93	CetZ tubulin-like proteins control archaeal cell shape. <i>Nature</i> , 2015 , 519, 362-5	50.4	83
92	The FtsK gamma domain directs oriented DNA translocation by interacting with KOPS. <i>Nature Structural and Molecular Biology</i> , 2006 , 13, 965-72	17.6	83
91	Structural and genetic analyses reveal the protein SepF as a new membrane anchor for the Z ring. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, E4601-10	11.5	80
90	Increasing complexity of the bacterial cytoskeleton. <i>Current Opinion in Cell Biology</i> , 2005 , 17, 75-81	9	80
89	Dimeric structure of the cell shape protein MreC and its functional implications. <i>Molecular Microbiology</i> , 2006 , 62, 1631-42	4.1	79
88	A folded conformation of MukBEF and cohesin. <i>Nature Structural and Molecular Biology</i> , 2019 , 26, 227-236	17.6	75
87	Localized dimerization and nucleoid binding drive gradient formation by the bacterial cell division inhibitor MipZ. <i>Molecular Cell</i> , 2012 , 46, 245-59	17.6	75
86	Robotic nanolitre protein crystallisation at the MRC Laboratory of Molecular Biology. <i>Progress in Biophysics and Molecular Biology</i> , 2005 , 88, 311-27	4.7	73
85	Scc2 Is a Potent Activator of Cohesin's ATPase that Promotes Loading by Binding Scc1 without Pds5. <i>Molecular Cell</i> , 2018 , 70, 1134-1148.e7	17.6	71
84	A bipolar spindle of antiparallel ParM filaments drives bacterial plasmid segregation. <i>Science</i> , 2012 , 338, 1334-7	33.3	70
83	A ferritin-based label for cellular electron cryotomography. <i>Structure</i> , 2011 , 19, 147-54	5.2	70

82	Prokaryotic cytoskeletons: protein filaments organizing small cells. <i>Nature Reviews Microbiology</i> , 2018 , 16, 187-201	22.2	69
81	Structural/functional homology between the bacterial and eukaryotic cytoskeletons. <i>Current Opinion in Cell Biology</i> , 2004 , 16, 24-31	9	68
80	Crystal structure of the bacterial cell division regulator MinD. <i>FEBS Letters</i> , 2001 , 492, 160-5	3.8	68
79	Towards understanding the molecular basis of bacterial DNA segregation. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2005 , 360, 523-35	5.8	64
78	Structure of the SARS-CoV-2 RNA-dependent RNA polymerase in the presence of favipiravir-RTP. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	63
77	Do the divisome and elongasome share a common evolutionary past?. <i>Current Opinion in Microbiology</i> , 2013 , 16, 745-51	7.9	62
76	Probing FtsZ and tubulin with C8-substituted GTP analogs reveals differences in their nucleotide binding sites. <i>Chemistry and Biology</i> , 2008 , 15, 189-99		62
75	A Polymerization-Associated Structural Switch in FtsZ That Enables Treadmilling of Model Filaments. <i>MBio</i> , 2017 , 8,	7.8	61
74	Filament structure of bacterial tubulin homologue TubZ. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 19766-71	11.5	61
73	Structure of the hexagonal surface layer on <i>Caulobacter crescentus</i> cells. <i>Nature Microbiology</i> , 2017 , 2, 17059	26.6	60
72	Structural analysis of the ParR/parC plasmid partition complex. <i>EMBO Journal</i> , 2007 , 26, 4413-22	13	60
71	Solution structure and domain architecture of the divisome protein FtsN. <i>Molecular Microbiology</i> , 2004 , 52, 651-60	4.1	60
70	A positively charged channel within the Smc1/Smc3 hinge required for sister chromatid cohesion. <i>EMBO Journal</i> , 2011 , 30, 364-78	13	58
69	Structural Insights into Ring Formation of Cohesin and Related Smc Complexes. <i>Trends in Cell Biology</i> , 2016 , 26, 680-693	18.3	58
68	Structures of actin-like ParM filaments show architecture of plasmid-segregating spindles. <i>Nature</i> , 2015 , 523, 106-10	50.4	57
67	Crystal structures of <i>Bacillus subtilis</i> Lon protease. <i>Journal of Molecular Biology</i> , 2010 , 401, 653-70	6.5	55
66	Structure and function of cohesin's Scc3/SA regulatory subunit. <i>FEBS Letters</i> , 2014 , 588, 3692-702	3.8	51
65	MinCD cell division proteins form alternating copolymeric cytomotive filaments. <i>Nature Communications</i> , 2014 , 5, 5341	17.4	51

64	Structural and mutational analysis of the cell division protein FtsQ. <i>Molecular Microbiology</i> , 2008 , 68, 110-23	4.1	49
63	New insights into the mechanisms of cytomotive actin and tubulin filaments. <i>International Review of Cell and Molecular Biology</i> , 2011 , 292, 1-71	6	48
62	Bacterial actin: architecture of the ParMRC plasmid DNA partitioning complex. <i>EMBO Journal</i> , 2008 , 27, 2230-8	13	48
61	Crystal structure of the N-terminal domain of MukB: a protein involved in chromosome partitioning. <i>Structure</i> , 1999 , 7, 1181-7	5.2	48
60	The structure of the AXH domain of spinocerebellar ataxin-1. <i>Journal of Biological Chemistry</i> , 2004 , 279, 3758-65	5.4	47
59	Cryo-EM structures of holo condensin reveal a subunit flip-flop mechanism. <i>Nature Structural and Molecular Biology</i> , 2020 , 27, 743-751	17.6	47
58	Crystal structure determination of FtsZ from <i>Methanococcus jannaschii</i> . <i>Journal of Structural Biology</i> , 1998 , 124, 235-43	3.4	41
57	Helical tubes of FtsZ from <i>Methanococcus jannaschii</i> . <i>Biological Chemistry</i> , 2000 , 381, 993-9	4.5	38
56	The structure of human thyroglobulin. <i>Nature</i> , 2020 , 578, 627-630	50.4	36
55	Crystal Structure of the Cohesin Gatekeeper Pds5 and in Complex with Kleisin Scc1. <i>Cell Reports</i> , 2016 , 14, 2108-2115	10.6	35
54	Dynamain architecture--from monomer to polymer. <i>Current Opinion in Structural Biology</i> , 2010 , 20, 791-8	8.1	34
53	The N-terminal membrane-spanning domain of the <i>Escherichia coli</i> DNA translocase FtsK hexamerizes at midcell. <i>MBio</i> , 2013 , 4, e00800-13	7.8	28
52	Distribution of the <i>Escherichia coli</i> structural maintenance of chromosomes (SMC)-like protein MukB in the cell. <i>Molecular Microbiology</i> , 2001 , 42, 1179-88	4.1	28
51	Reconstitution of a prokaryotic minus end-tracking system using TubRC centromeric complexes and tubulin-like protein TubZ filaments. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, E1845-50	11.5	27
50	A cylindrical specimen holder for electron cryo-tomography. <i>Ultramicroscopy</i> , 2014 , 137, 20-9	3.1	26
49	Proteasome: from structure to function. <i>Current Opinion in Biotechnology</i> , 1996 , 7, 376-85	11.4	25
48	Transport of DNA within cohesin involves clamping on top of engaged heads by Scc2 and entrapment within the ring by Scc3. <i>ELife</i> , 2020 , 9,	8.9	25
47	Collaborative protein filaments. <i>EMBO Journal</i> , 2015 , 34, 2312-20	13	24

46	LeoA, B and C from enterotoxigenic Escherichia coli (ETEC) are bacterial dynamins. <i>PLoS ONE</i> , 2014 , 9, e107211	3.7	24
45	Superstructure of the centromeric complex of TubZRC plasmid partitioning systems. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 16522-7	11.5	24
44	Crenactin forms actin-like double helical filaments regulated by arcadin-2. <i>ELife</i> , 2016 , 5,	8.9	23
43	Crenactin from <i>Pyrobaculum calidifontis</i> is closely related to actin in structure and forms steep helical filaments. <i>FEBS Letters</i> , 2014 , 588, 776-82	3.8	22
42	Structure of the tubulin/FtsZ-like protein TubZ from <i>Pseudomonas bacteriophage</i> Φ Z. <i>Journal of Molecular Biology</i> , 2013 , 425, 2164-73	6.5	22
41	Centromere pairing by a plasmid-encoded type I ParB protein. <i>Journal of Biological Chemistry</i> , 2007 , 282, 28216-25	5.4	22
40	Preliminary X-ray crystallographic study of the proteasome from <i>Thermoplasma acidophilum</i> . <i>Journal of Molecular Biology</i> , 1993 , 234, 881-4	6.5	21
39	X-ray and cryo-EM structures of monomeric and filamentous actin-like protein MamK reveal changes associated with polymerization. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 13396-13401	11.5	19
38	Crystal structure of the ubiquitin-like protein YukD from <i>Bacillus subtilis</i> . <i>FEBS Letters</i> , 2005 , 579, 3837-418	4.8	19
37	Structural Analysis of the Interaction between the Bacterial Cell Division Proteins FtsQ and FtsB. <i>MBio</i> , 2018 , 9,	7.8	17
36	Structure of the ParM filament at 8.5Å resolution. <i>Journal of Structural Biology</i> , 2013 , 184, 33-42	3.4	15
35	Four-stranded mini microtubules formed by BtubAB show dynamic instability. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, E5950-E5958	11.5	15
34	Structural investigation of proteasome inhibition. <i>Biological Chemistry</i> , 1997 , 378, 239-47	4.5	15
33	Conserved sequence motif at the C-terminus of the bacterial cell-division protein FtsA. <i>Biochimie</i> , 2001 , 83, 117-20	4.6	14
32	FzIA, an essential regulator of FtsZ filament curvature, controls constriction rate during <i>Caulobacter</i> division. <i>Molecular Microbiology</i> , 2018 , 107, 180-197	4.1	13
31	Crystal structure of the Z-ring associated cell division protein ZapC from <i>Escherichia coli</i> . <i>FEBS Letters</i> , 2015 , 589, 3822-8	3.8	12
30	The structure of bactofilin filaments reveals their mode of membrane binding and lack of polarity. <i>Nature Microbiology</i> , 2019 , 4, 2357-2368	26.6	11
29	FtsK in motion reveals its mechanism for double-stranded DNA translocation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 14202-14208	11.5	11

28	3D electron microscopy of the interaction of kinesin with tubulin. <i>Cell Structure and Function</i> , 1999 , 24, 277-84	2.2	10
27	Activation of Xer-recombination at dif: structural basis of the FtsK/XerD interaction. <i>Scientific Reports</i> , 2016 , 6, 33357	4.9	10
26	Single-dose immunisation with a multimerised SARS-CoV-2 receptor binding domain (RBD) induces an enhanced and protective response in mice. <i>FEBS Letters</i> , 2021 , 595, 2323-2340	3.8	10
25	Cryo-EM structure of MukBEF reveals DNA loop entrapment at chromosomal unloading sites. <i>Molecular Cell</i> , 2021 , 81, 4891-4906.e8	17.6	9
24	Two FtsZ proteins orchestrate archaeal cell division through distinct functions in ring assembly and constriction		
23	Overview of the Diverse Roles of Bacterial and Archaeal Cytoskeletons. <i>Sub-Cellular Biochemistry</i> , 2017 , 84, 1-26	5.5	8
22	Cryo-EM reconstruction of AlfA from reveals the structure of a simplified actin-like filament at 3.4-Å resolution. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 3458-3463	11.5	8
21	Identifying proteins bound to native mitotic ESC chromosomes reveals chromatin repressors are important for compaction. <i>Nature Communications</i> , 2020 , 11, 4118	17.4	8
20	Cell division in the archaeon <i>Haloferax volcanii</i> relies on two FtsZ proteins with distinct functions in division ring assembly and constriction. <i>Nature Microbiology</i> , 2021 , 6, 594-605	26.6	7
19	Automated Protocols for Macromolecular Crystallization at the MRC Laboratory of Molecular Biology. <i>Journal of Visualized Experiments</i> , 2018 ,	1.6	6
18	Multiple interactions between Scc1 and Scc2 activate cohesin's DNA dependent ATPase and replace Pds5 during loading		6
17	The subtle allostery of microtubule dynamics. <i>Nature Structural and Molecular Biology</i> , 2014 , 21, 505-6	17.6	5
16	SnapShot: The Bacterial Cytoskeleton. <i>Cell</i> , 2016 , 166, 522-522.e1	56.2	4
15	Cryo-EM structure of MukBEF reveals DNA loop entrapment at chromosomal unloading sites		4
14	Folding of cohesin's coiled coil is important for Scc2/4-induced association with chromosomes. <i>ELife</i> , 2021 , 10,	8.9	4
13	Author response: Transport of DNA within cohesin involves clamping on top of engaged heads by Scc2 and entrapment within the ring by Scc3 2020 ,		3
12	Cryo-EM structure of the full-length Lon protease from <i>Thermus thermophilus</i> . <i>FEBS Letters</i> , 2021 , 595, 2691-2700	3.8	3
11	Cryo-EM structure of the MinCD copolymeric filament from <i>Pseudomonas aeruginosa</i> at 3.1 Å resolution. <i>FEBS Letters</i> , 2019 , 593, 1915-1926	3.8	2

10	The bacterial actin-like cell division protein FtsA forms curved antiparallel double filaments upon binding of FtsN		2
9	High-resolution mapping of metal ions reveals principles of surface layer assembly in <i>Caulobacter crescentus</i> cells. <i>Structure</i> , 2021 ,	5.2	2
8	A folded conformation of MukBEF and Cohesin		2
7	MreB Filaments Create Rod Shape By Aligning Along Principal Membrane Curvature		2
6	Single-dose immunisation with a multimerised SARS-CoV-2 receptor binding domain (RBD) induces an enhanced and protective response in mice		2
5	Clamping of DNA shuts the condensin neck gate.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022 , 119, e2120006119	11.5	2
4	A polymerisation-associated conformational switch in FtsZ that enables treadmilling		1
3	Cryo-EM reconstruction of Alfa from <i>Bacillus subtilis</i> reveals the structure of a simplified actin-like filament at 3.4 Å resolution		1
2	Das bakterielle Zytoskelett. <i>BioSpektrum</i> , 2011 , 17, 396-398		0.1
1	Bacterial and archaeal cytoskeletons. <i>Current Biology</i> , 2021 , 31, R542-R546		6.3