Jan Lwe

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

135	13,078 citations	61	114
papers		h-index	g-index
153	15,043 ext. citations	13.6	6.51
ext. papers		avg, IF	L-index

#	Paper	IF	Citations
135	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
134	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
133	High-resolution mapping of metal ions reveals principles of surface layer assembly in Caulobacter crescentus cells. <i>Structure</i> , 2021 ,	5.2	2
132	Cell division in the archaeon Haloferax volcanii 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
131	Bacterial and archaeal cytoskeletons. <i>Current Biology</i> , 2021 , 31, R542-R546	6.3	
130	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
129	Folding of cohesin's coiled coil is important for Scc2/4-induced association with chromosomes. <i>ELife</i> , 2021 , 10,	8.9	4
128	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
127	Cryo-EM structure of the full-length Lon protease from Thermus thermophilus. <i>FEBS Letters</i> , 2021 , 595, 2691-2700	3.8	3
126	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
125	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
124	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
123	The structure of human thyroglobulin. <i>Nature</i> , 2020 , 578, 627-630	50.4	36
122	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
121	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
120	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
119	Cryo-EM structure of the MinCD copolymeric filament from Pseudomonas aeruginosa at 3.1 [] resolution. <i>FEBS Letters</i> , 2019 , 593, 1915-1926	3.8	2

118	A folded conformation of MukBEF and cohesin. <i>Nature Structural and Molecular Biology</i> , 2019 , 26, 227-7	2 36 9.6	75
117	Automated Protocols for Macromolecular Crystallization at the MRC Laboratory of Molecular Biology. <i>Journal of Visualized Experiments</i> , 2018 ,	1.6	6
116	Cryo-EM reconstruction of AlfA from reveals the structure of a simplified actin-like filament at 3.4-Iresolution. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 3458-3463	11.5	8
115	Prokaryotic cytoskeletons: protein filaments organizing small cells. <i>Nature Reviews Microbiology</i> , 2018 , 16, 187-201	22.2	69
114	FzlA, an essential regulator of FtsZ filament curvature, controls constriction rate during Caulobacter division. <i>Molecular Microbiology</i> , 2018 , 107, 180-197	4.1	13
113	Structural Analysis of the Interaction between the Bacterial Cell Division Proteins FtsQ and FtsB. <i>MBio</i> , 2018 , 9,	7.8	17
112	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
111	MreB filaments align along greatest principal membrane curvature to orient cell wall synthesis. <i>ELife</i> , 2018 , 7,	8.9	95
110	Structure of the hexagonal surface layer on Caulobacter crescentus cells. <i>Nature Microbiology</i> , 2017 , 2, 17059	26.6	60
109	Overview of the Diverse Roles of Bacterial and Archaeal Cytoskeletons. <i>Sub-Cellular Biochemistry</i> , 2017 , 84, 1-26	5.5	8
108	A Polymerization-Associated Structural Switch in FtsZ That Enables Treadmilling of Model Filaments. <i>MBio</i> , 2017 , 8,	7.8	61
107	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
106	SnapShot: The Bacterial Cytoskeleton. <i>Cell</i> , 2016 , 166, 522-522.e1	56.2	4
105	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
104	Crystal Structure of the Cohesin Gatekeeper Pds5 and in Complex with Kleisin Scc1. <i>Cell Reports</i> , 2016 , 14, 2108-2115	10.6	35
103	Crenactin forms actin-like double helical filaments regulated by arcadin-2. <i>ELife</i> , 2016 , 5,	8.9	23
102	Activation of Xer-recombination at dif: structural basis of the FtsKEXerD interaction. <i>Scientific Reports</i> , 2016 , 6, 33357	4.9	10
101	Structural Insights into Ring Formation of Cohesin and Related Smc Complexes. <i>Trends in Cell Biology</i> , 2016 , 26, 680-693	18.3	58

100	Structures of actin-like ParM filaments show architecture of plasmid-segregating spindles. <i>Nature</i> , 2015 , 523, 106-10	50.4	57
99	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
98	Advances in Single-Particle Electron Cryomicroscopy Structure Determination applied to Sub-tomogram Averaging. <i>Structure</i> , 2015 , 23, 1743-1753	5.2	142
97	CetZ tubulin-like proteins control archaeal cell shape. <i>Nature</i> , 2015 , 519, 362-5	50.4	83
96	Collaborative protein filaments. EMBO Journal, 2015, 34, 2312-20	13	24
95	Crystal structure of the Z-ring associated cell division protein ZapC from Escherichia coli. <i>FEBS Letters</i> , 2015 , 589, 3822-8	3.8	12
94	Closing the cohesin ring: structure and function of its Smc3-kleisin interface. <i>Science</i> , 2014 , 346, 963-7	33.3	188
93	The subtle allostery of microtubule dynamics. <i>Nature Structural and Molecular Biology</i> , 2014 , 21, 505-6	17.6	5
92	A cylindrical specimen holder for electron cryo-tomography. <i>Ultramicroscopy</i> , 2014 , 137, 20-9	3.1	26
91	Crenactin from Pyrobaculum calidifontis is closely related to actin in structure and forms steep helical filaments. <i>FEBS Letters</i> , 2014 , 588, 776-82	3.8	22
90	LeoA, B and C from enterotoxigenic Escherichia coli (ETEC) are bacterial dynamins. <i>PLoS ONE</i> , 2014 , 9, e107211	3.7	24
89	Structure and function of cohesin's Scc3/SA regulatory subunit. <i>FEBS Letters</i> , 2014 , 588, 3692-702	3.8	51
88	MinCD cell division proteins form alternating copolymeric cytomotive filaments. <i>Nature Communications</i> , 2014 , 5, 5341	17.4	51
87	Bacterial actin MreB forms antiparallel double filaments. <i>ELife</i> , 2014 , 3, e02634	8.9	106
86	Architecture of the ring formed by the tubulin homologue FtsZ in bacterial cell division. <i>ELife</i> , 2014 , 3, e04601	8.9	169
85	Do the divisome and elongasome share a common evolutionary past?. <i>Current Opinion in Microbiology</i> , 2013 , 16, 745-51	7.9	62
84	Structure of the ParM filament at 8.5 resolution. <i>Journal of Structural Biology</i> , 2013 , 184, 33-42	3.4	15
83	Structure of the tubulin/FtsZ-like protein TubZ from Pseudomonas bacteriophage &Z. <i>Journal of Molecular Biology</i> , 2013 , 425, 2164-73	6.5	22

(2009-2013)

82	The N-terminal membrane-spanning domain of the Escherichia coli DNA translocase FtsK hexamerizes at midcell. <i>MBio</i> , 2013 , 4, e00800-13	7.8	28
81	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
80	A bipolar spindle of antiparallel ParM filaments drives bacterial plasmid segregation. <i>Science</i> , 2012 , 338, 1334-7	33.3	70
79	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
7 ⁸	FtsA forms actin-like protofilaments. <i>EMBO Journal</i> , 2012 , 31, 2249-60	13	173
77	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
76	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
75	Direct membrane binding by bacterial actin MreB. <i>Molecular Cell</i> , 2011 , 43, 478-87	17.6	181
74	A positively charged channel within the Smc1/Smc3 hinge required for sister chromatid cohesion. <i>EMBO Journal</i> , 2011 , 30, 364-78	13	58
73	A ferritin-based label for cellular electron cryotomography. <i>Structure</i> , 2011 , 19, 147-54	5.2	70
72	Das bakterielle Zytoskelett. <i>BioSpektrum</i> , 2011 , 17, 396-398	0.1	
71	Bacterial actin MreB assembles in complex with cell shape protein RodZ. EMBO Journal, 2010, 29, 1081-	·9 0 3	113
70	Features critical for membrane binding revealed by DivIVA crystal structure. <i>EMBO Journal</i> , 2010 , 29, 1988-2001	13	86
69	The ParMRC system: molecular mechanisms of plasmid segregation by actin-like filaments. <i>Nature Reviews Microbiology</i> , 2010 , 8, 683-92	22.2	94
68	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
67	Crystal structures of Bacillus subtilis Lon protease. <i>Journal of Molecular Biology</i> , 2010 , 401, 653-70	6.5	55
66	Dynamin architecturefrom monomer to polymer. Current Opinion in Structural Biology, 2010 , 20, 791-8	8.1	34
65	Electron cryomicroscopy of E. coli reveals filament bundles involved in plasmid DNA segregation. <i>Science</i> , 2009 , 323, 509-12	33.3	86

64	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
63	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
62	Bacterial actin: architecture of the ParMRC plasmid DNA partitioning complex. <i>EMBO Journal</i> , 2008 , 27, 2230-8	13	48
61	Structural and mutational analysis of the cell division protein FtsQ. <i>Molecular Microbiology</i> , 2008 , 68, 110-23	4.1	49
60	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
59	Molecular mechanism of sequence-directed DNA loading and translocation by FtsK. <i>Molecular Cell</i> , 2008 , 31, 498-509	17.6	88
58	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
57	Structural analysis of the ParR/parC plasmid partition complex. <i>EMBO Journal</i> , 2007 , 26, 4413-22	13	60
56	Centromere pairing by a plasmid-encoded type I ParB protein. <i>Journal of Biological Chemistry</i> , 2007 , 282, 28216-25	5.4	22
55	Structural insights into the conformational variability of FtsZ. <i>Journal of Molecular Biology</i> , 2007 , 373, 1229-42	6.5	135
54	RF cloning: a restriction-free method for inserting target genes into plasmids. <i>Journal of Proteomics</i> , 2006 , 67, 67-74		402
53	Dynamic filaments of the bacterial cytoskeleton. <i>Annual Review of Biochemistry</i> , 2006 , 75, 467-92	29.1	169
52	Double-stranded DNA translocation: structure and mechanism of hexameric FtsK. <i>Molecular Cell</i> , 2006 , 23, 457-69	17.6	185
51	Dimeric structure of the cell shape protein MreC and its functional implications. <i>Molecular Microbiology</i> , 2006 , 62, 1631-42	4.1	79
50	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
49	A bacterial dynamin-like protein. <i>Nature</i> , 2006 , 444, 766-9	50.4	182
48	Crystal structure of the ubiquitin-like protein YukD from Bacillus subtilis. FEBS Letters, 2005 , 579, 3837-	- 431 8	19
47	Bacterial chromosome segregation: structure and DNA binding of the Soj dimera conserved biological switch. <i>EMBO Journal</i> , 2005 , 24, 270-82	13	233

46	Increasing complexity of the bacterial cytoskeleton. Current Opinion in Cell Biology, 2005, 17, 75-81	9	80
45	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
44	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
43	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
42	Murein (peptidoglycan) binding property of the essential cell division protein FtsN from Escherichia coli. <i>Journal of Bacteriology</i> , 2004 , 186, 6728-37	3.5	92
41	The structure of the AXH domain of spinocerebellar ataxin-1. <i>Journal of Biological Chemistry</i> , 2004 , 279, 3758-65	5.4	47
40	Solution structure and domain architecture of the divisome protein FtsN. <i>Molecular Microbiology</i> , 2004 , 52, 651-60	4.1	60
39	Structural analysis of the chromosome segregation protein Spo0J from Thermus thermophilus. <i>Molecular Microbiology</i> , 2004 , 53, 419-32	4.1	84
38	Structural insights into FtsZ protofilament formation. <i>Nature Structural and Molecular Biology</i> , 2004 , 11, 1243-50	17.6	228
37	Structural/functional homology between the bacterial and eukaryotic cytoskeletons. <i>Current Opinion in Cell Biology</i> , 2004 , 16, 24-31	9	68
36		9	116
	Opinion in Cell Biology, 2004 , 16, 24-31 Molecules of the bacterial cytoskeleton. Annual Review of Biophysics and Biomolecular Structure,	9	
36	Opinion in Cell Biology, 2004 , 16, 24-31 Molecules of the bacterial cytoskeleton. <i>Annual Review of Biophysics and Biomolecular Structure</i> , 2004 , 33, 177-98		116
36 35	Opinion in Cell Biology, 2004, 16, 24-31 Molecules of the bacterial cytoskeleton. Annual Review of Biophysics and Biomolecular Structure, 2004, 33, 177-98 Structure and stability of cohesin's Smc1-kleisin interaction. Molecular Cell, 2004, 15, 951-64 The crystal structure of ZapA and its modulation of FtsZ polymerisation. Journal of Molecular	17.6	116 246
36 35 34	Opinion in Cell Biology, 2004, 16, 24-31 Molecules of the bacterial cytoskeleton. Annual Review of Biophysics and Biomolecular Structure, 2004, 33, 177-98 Structure and stability of cohesin's Smc1-kleisin interaction. Molecular Cell, 2004, 15, 951-64 The crystal structure of ZapA and its modulation of FtsZ polymerisation. Journal of Molecular Biology, 2004, 341, 839-52 Structure of the Jab1/MPN domain and its implications for proteasome function. Biochemistry,	17.6 6.5	116246105
36 35 34 33	Opinion in Cell Biology, 2004, 16, 24-31 Molecules of the bacterial cytoskeleton. Annual Review of Biophysics and Biomolecular Structure, 2004, 33, 177-98 Structure and stability of cohesin's Smc1-kleisin interaction. Molecular Cell, 2004, 15, 951-64 The crystal structure of ZapA and its modulation of FtsZ polymerisation. Journal of Molecular Biology, 2004, 341, 839-52 Structure of the Jab1/MPN domain and its implications for proteasome function. Biochemistry, 2003, 42, 11460-5 Crystal structure of the SOS cell division inhibitor SulA and in complex with FtsZ. Proceedings of the	17.6 6.5 3.2	116246105100
36 35 34 33 32	Molecules of the bacterial cytoskeleton. Annual Review of Biophysics and Biomolecular Structure, 2004, 33, 177-98 Structure and stability of cohesin's Smc1-kleisin interaction. Molecular Cell, 2004, 15, 951-64 The crystal structure of ZapA and its modulation of FtsZ polymerisation. Journal of Molecular Biology, 2004, 341, 839-52 Structure of the Jab1/MPN domain and its implications for proteasome function. Biochemistry, 2003, 42, 11460-5 Crystal structure of the SOS cell division inhibitor SulA and in complex with FtsZ. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 7889-94 The crystal structure of AF1521 a protein from Archaeoglobus fulgidus with homology to the	17.6 6.5 3.2 11.5	116246105100187

28	Molecular architecture of SMC proteins and the yeast cohesin complex. <i>Molecular Cell</i> , 2002 , 9, 773-88	17.6	565
27	Distribution of the Escherichia coli structural maintenance of chromosomes (SMC)-like protein MukB in the cell. <i>Molecular Microbiology</i> , 2001 , 42, 1179-88	4.1	28
26	Prokaryotic origin of the actin cytoskeleton. <i>Nature</i> , 2001 , 413, 39-44	50.4	646
25	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
24	Conserved sequence motif at the C-terminus of the bacterial cell-division protein FtsA. <i>Biochimie</i> , 2001 , 83, 117-20	4.6	14
23	Crystal structure of the bacterial cell division regulator MinD. FEBS Letters, 2001, 492, 160-5	3.8	68
22	Helical tubes of FtsZ from Methanococcus jannaschii. <i>Biological Chemistry</i> , 2000 , 381, 993-9	4.5	38
21	3D electron microscopy of the interaction of kinesin with tubulin. <i>Cell Structure and Function</i> , 1999 , 24, 277-84	2.2	10
20	How Taxol stabilises microtubule structure. <i>Chemistry and Biology</i> , 1999 , 6, R65-9		189
19	Tubulin-like protofilaments in Ca2+-induced FtsZ sheets. <i>EMBO Journal</i> , 1999 , 18, 2364-71	13	197
18	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
17	Crystal structure of the bacterial cell-division protein FtsZ. <i>Nature</i> , 1998 , 391, 203-6	50.4	730
16	Crystal structure of the thermosome, the archaeal chaperonin and homolog of CCT. Cell, 1998, 93, 125-	3 § 6.2	375
15	Crystal structure determination of FtsZ from Methanococcus jannaschii. <i>Journal of Structural Biology</i> , 1998 , 124, 235-43	3.4	41
14	Structural investigation of proteasome inhibition. <i>Biological Chemistry</i> , 1997 , 378, 239-47	4.5	15
13	Structure of 20S proteasome from yeast at 2.4 A resolution. <i>Nature</i> , 1997 , 386, 463-71	50.4	1996
12	Crystal structure of dimethyl sulfoxide reductase from Rhodobacter capsulatus at 1.88 A resolution. <i>Journal of Molecular Biology</i> , 1996 , 263, 53-69	6.5	248
11	Proteasome: from structure to function. <i>Current Opinion in Biotechnology</i> , 1996 , 7, 376-85	11.4	25

LIST OF PUBLICATIONS

10	Preliminary X-ray crystallographic study of the proteasome from Thermoplasma acidophilum. Journal of Molecular Biology, 1993 , 234, 881-4	6.5	21	
9	The bacterial actin-like cell division protein FtsA forms curved antiparallel double filaments upon binding of FtsN		2	
8	A folded conformation of MukBEF and Cohesin		2	
7	A polymerisation-associated conformational switch in FtsZ that enables treadmilling		1	
6	MreB Filaments Create Rod Shape By Aligning Along Principal Membrane Curvature		2	
5	Two FtsZ proteins orchestrate archaeal cell division through distinct functions in ring assembly and cor	strictio	ON)	
4	Multiple interactions between Scc1 and Scc2 activate cohesin® DNA dependent ATPase and replace Pds5 during loading		6	
3	Cryo-EM reconstruction of AlfA fromBacillus subtilisreveals the structure of a simplified actin-like filament at 3.4 Iresolution		1	
2	Single-dose immunisation with a multimerised SARS-CoV-2 receptor binding domain (RBD) induces an enhanced and protective response in mice		2	
1	Cryo-EM structure of MukBEF reveals DNA loop entrapment at chromosomal unloading sites		4	