Thomas D Pollard

List of Publications by Year in Descending Order

214 papers	27,404 citations	83 h-index	164 g-index
238 ext. papers	30,396 ext. citations	11.2 avg, IF	7.59 L-index

#	Paper	IF	Citations
214	Origin of eukaryotes: What can be learned from the first successfully isolated Asgard archaeon.. *Faculty Reviews*, **2022**, 11, 3	1.2	
213	A model of actin-driven endocytosis explains differences of endocytic motility in budding and fission yeast.. *Molecular Biology of the Cell*, **2021**, mbcE21070362	3.5	0
212	Counting actin in contractile rings reveals novel contributions of cofilin and type II myosins to fission yeast cytokinesis. *Molecular Biology of the Cell*, **2021**, mbcE21080376	3.5	4
211	Sample Preparation and Imaging Conditions Affect mEos3.2 Photophysics in Fission Yeast Cells. *Biophysical Journal*, **2021**, 120, 21-34	2.9	2
210	Mechanism of actin filament nucleation. *Biophysical Journal*, **2021**, 120, 4399-4417	2.9	1
209	Force and phosphate release from Arp2/3 complex promote dissociation of actin filament branches. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 13519-13528	11.5	12
208	Myosins in Cytokinesis. *Advances in Experimental Medicine and Biology*, **2020**, 1239, 233-244	3.6	2
207	Microtubule nucleation promoters Mto1 and Mto2 regulate cytokinesis in fission yeast. *Molecular Biology of the Cell*, **2020**, 31, 1846-1856	3.5	2
206	Structural basis for polarized elongation of actin filaments. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 30458-30464	11.5	6
205	Cryo-electron microscopy structures of pyrene-labeled ADP-P- and ADP-actin filaments. *Nature Communications*, **2020**, 11, 5897	17.4	5
204	The Functionally Important N-Terminal Half of Fission Yeast Mid1p Anillin Is Intrinsically Disordered and Undergoes Phase Separation. *Biochemistry*, **2019**, 58, 3031-3041	3.2	10
203	Empowering statistical methods for cellular and molecular biologists. *Molecular Biology of the Cell*, **2019**, 30, 1359-1368	3.5	11
202	Cell Motility and Cytokinesis: From Mysteries to Molecular Mechanisms in Five Decades. *Annual Review of Cell and Developmental Biology*, **2019**, 35, 1-28	12.6	12
201	Actin assembly produces sufficient forces for endocytosis in yeast. *Molecular Biology of the Cell*, **2019**, 30, 2014-2024	3.5	11
200	Direct comparison of clathrin-mediated endocytosis in budding and fission yeast reveals conserved and evolvable features. *ELife*, **2019**, 8,	8.9	9
199	Mechanism of actin polymerization revealed by cryo-EM structures of actin filaments with three different bound nucleotides. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 4265-4274	11.5	95
198	Molecular Mechanism of Cytokinesis. *Annual Review of Biochemistry*, **2019**, 88, 661-689	29.1	66

197	Fission yeast Myo2: Molecular organization and diffusion in the cytoplasm. *Cytoskeleton*, **2018**, 75, 164-173	2.4	7
196	Involvement of the septation initiation network in events during cytokinesis in fission yeast. *Journal of Cell Science*, **2018**, 131,	5.3	3
195	Gating mechanisms during actin filament elongation by formins. *ELife*, **2018**, 7,	8.9	14
194	Phosphorylation of Arp2 is not essential for Arp2/3 complex activity in fission yeast. *Life Science Alliance*, **2018**, 1, e201800202	5.8	2
193	High-speed superresolution imaging of the proteins in fission yeast clathrin-mediated endocytic actin patches. *Molecular Biology of the Cell*, **2018**, 29, 295-303	3.5	22
192	Latrunculin A Accelerates Actin Filament Depolymerization in Addition to Sequestering Actin Monomers. *Current Biology*, **2018**, 28, 3183-3192.e2	6.3	44
191	Evolution of research on cellular motility over five decades. *Biophysical Reviews*, **2018**, 10, 1503-1508	3.7	2
190	Conformational changes in Arp2/3 complex induced by ATP, WASp-VCA, and actin filaments. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E8642-E8651	11.5	25
189	Overview of the Cytoskeleton from an Evolutionary Perspective. *Cold Spring Harbor Perspectives in Biology*, **2018**, 10,	10.2	32
188	Response to Zambon et al. *Current Biology*, **2017**, 27, R101-R102	6.3	4
187	Tribute to Fumio Oosawa the pioneer in actin biophysics. *Cytoskeleton*, **2017**, 74, 446-449	2.4	2
186	Analysis of interphase node proteins in fission yeast by quantitative and superresolution fluorescence microscopy. *Molecular Biology of the Cell*, **2017**, 28, 3203-3214	3.5	19
185	Nano-scale actin-network characterization of fibroblast cells lacking functional Arp2/3 complex. *Journal of Structural Biology*, **2017**, 197, 312-321	3.4	14
184	Nine unanswered questions about cytokinesis. *Journal of Cell Biology*, **2017**, 216, 3007-3016	7.3	50
183	What We Know and Do Not Know About Actin. *Handbook of Experimental Pharmacology*, **2017**, 235, 331-347	3.4	27
182	A Third Look at the Structure of Leiomodin Bound to Actin. *Biophysical Journal*, **2017**, 113, 762-764	2.9	
181	Molecular organization of cytokinesis nodes and contractile rings by super-resolution fluorescence microscopy of live fission yeast. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, E5876-E5885	11.5	89
180	Theory from the Oster Laboratory Leaps Ahead of Experiment in Understanding Actin-Based Cellular Motility. *Biophysical Journal*, **2016**, 111, 1589-1592	2.9	4

179	Mechanistic biological modeling thrives. *Science*, **2016**, 351, 234-5	33.3	2
178	Actin and Actin-Binding Proteins. *Cold Spring Harbor Perspectives in Biology*, **2016**, 8,	10.2	321
177	High-Speed Super-Resolution Imaging of Live Fission Yeast Cells. *Methods in Molecular Biology*, **2016**, 1369, 45-57	1.4	16
176	Membrane fission by dynamin: what we know and what we need to know. *EMBO Journal*, **2016**, 35, 2270-2284	9.4	267
175	Avoiding artefacts when counting polymerized actin in live cells with LifeAct fused to fluorescent proteins. *Nature Cell Biology*, **2016**, 18, 676-83	23.4	82
174	Aip1 promotes actin filament severing by cofilin and regulates constriction of the cytokinetic contractile ring. *Journal of Biological Chemistry*, **2015**, 290, 2289-300	5.4	44
173	Three myosins contribute uniquely to the assembly and constriction of the fission yeast cytokinetic contractile ring. *Current Biology*, **2015**, 25, 1955-65	6.3	50
172	Abl2/Abl-related gene stabilizes actin filaments, stimulates actin branching by actin-related protein 2/3 complex, and promotes actin filament severing by cofilin. *Journal of Biological Chemistry*, **2015**, 290, 4038-46	5.4	31
171	Crystals of the Arp2/3 complex in two new space groups with structural information about actin-related protein 2 and potential WASP binding sites. *Acta Crystallographica Section F, Structural Biology Communications*, **2015**, 71, 1161-8	1.1	9
170	The fission yeast cytokinetic contractile ring regulates septum shape and closure. *Journal of Cell Science*, **2015**, 128, 3672-81	5.3	29
169	New Light on Growth Cone Navigation. *Developmental Cell*, **2015**, 35, 672-3	10.2	1
168	A role for F-BAR protein Rga7p during cytokinesis in S. pombe. *Journal of Cell Science*, **2015**, 128, 2259-68	5.3	18
167	Electrostatic interactions between the Bni1p Formin FH2 domain and actin influence actin filament nucleation. *Structure*, **2015**, 23, 68-79	5.2	12
166	The septation initiation network controls the assembly of nodes containing Cdr2p for cytokinesis in fission yeast. *Journal of Cell Science*, **2015**, 128, 441-6	5.3	12
165	Contractile ring stability in S. pombe depends on F-BAR protein Cdc15p and Bgs1p transport from the Golgi complex. *Cell Reports*, **2014**, 8, 1533-44	10.6	58
164	Characterization of the roles of Blt1p in fission yeast cytokinesis. *Molecular Biology of the Cell*, **2014**, 25, 1946-57	3.5	16
163	Mechanism of cytokinetic contractile ring constriction in fission yeast. *Developmental Cell*, **2014**, 29, 547-561	10.1	101
162	Synergies between Aip1p and capping protein subunits (Acp1p and Acp2p) in clathrin-mediated endocytosis and cell polarization in fission yeast. *Molecular Biology of the Cell*, **2014**, 25, 3515-27	3.5	33

161	Local and global analysis of endocytic patch dynamics in fission yeast using a new "temporal superresolution" realignment method. *Molecular Biology of the Cell*, **2014**, 25, 3501-14	3.5	39
160	The value of mechanistic biophysical information for systems-level understanding of complex biological processes such as cytokinesis. *Biophysical Journal*, **2014**, 107, 2499-507	2.9	16
159	Cytokinetic nodes in fission yeast arise from two distinct types of nodes that merge during interphase. *Journal of Cell Biology*, **2014**, 204, 977-88	7.3	48
158	Interaction of profilin with the barbed end of actin filaments. *Biochemistry*, **2013**, 52, 6456-66	3.2	56
157	Measuring affinities of fission yeast spindle pole body proteins in live cells across the cell cycle. *Biophysical Journal*, **2013**, 105, 1324-35	2.9	11
156	Actin filament severing by cofilin dismantles actin patches and produces mother filaments for new patches. *Current Biology*, **2013**, 23, 1154-62	6.3	54
155	Separate roles of IQGAP Rng2p in forming and constricting the Schizosaccharomyces pombe cytokinetic contractile ring. *Molecular Biology of the Cell*, **2013**, 24, 1904-17	3.5	24
154	No question about exciting questions in cell biology. *PLoS Biology*, **2013**, 11, e1001734	9.7	9
153	Take advantage of time in your experiments: a guide to simple, informative kinetics assays. *Molecular Biology of the Cell*, **2013**, 24, 1103-10	3.5	32
152	Tension modulates actin filament polymerization mediated by formin and profilin. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 9752-7	11.5	97
151	Remembrance of Hugh E. Huxley, a founder of our field. *Cytoskeleton*, **2013**, 70, 471-5	2.4	1
150	Remembrance of Ray Rappaport, pioneer in the study of cytokinesis. *Cytoskeleton*, **2012**, 69, 659-69	2.4	2
149	The obligation for biologists to commit to political advocacy. *Cell*, **2012**, 151, 239-43	56.2	9
148	Determinants of Formin Homology 1 (FH1) domain function in actin filament elongation by formins. *Journal of Biological Chemistry*, **2012**, 287, 7812-20	5.4	48
147	Key structural features of the actin filament Arp2/3 complex branch junction revealed by molecular simulation. *Journal of Molecular Biology*, **2012**, 416, 148-61	6.5	25
146	Formins filter modified actin subunits during processive elongation. *Journal of Structural Biology*, **2012**, 177, 32-9	3.4	65
145	Anillin-related protein Mid1p coordinates the assembly of the cytokinetic contractile ring in fission yeast. *Molecular Biology of the Cell*, **2012**, 23, 3982-92	3.5	34
144	Three-dimensional reconstructions of Arp2/3 complex with bound nucleation promoting factors. *EMBO Journal*, **2012**, 31, 236-47	13	63

143	Characterization of structural and functional domains of the anillin-related protein Mid1p that contribute to cytokinesis in fission yeast. *Molecular Biology of the Cell*, **2012**, 23, 3993-4007	3.5	23
142	Arp2/3 complex-dependent actin networks constrain myosin II function in driving retrograde actin flow. *Journal of Cell Biology*, **2012**, 197, 939-56	7.3	93
141	Political advocacy by the American Society for Cell Biology and its partners. *Molecular Biology of the Cell*, **2012**, 23, 4171-4	3.5	1
140	Distinct roles for F-BAR proteins Cdc15p and Bzz1p in actin polymerization at sites of endocytosis in fission yeast. *Current Biology*, **2011**, 21, 1450-9	6.3	65
139	Actin filament severing by cofilin is more important for assembly than constriction of the cytokinetic contractile ring. *Journal of Cell Biology*, **2011**, 195, 485-98	7.3	75
138	Purification of actin from fission yeast Schizosaccharomyces pombe and characterization of functional differences from muscle actin. *Journal of Biological Chemistry*, **2011**, 286, 5784-92	5.4	21
137	Cell biology. Formin tip tracking. *Science*, **2011**, 331, 39-41	33.3	
136	Structural and biochemical characterization of two binding sites for nucleation-promoting factor WASp-VCA on Arp2/3 complex. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, E463-71	11.5	105
135	Understanding cytokinesis: lessons from fission yeast. *Nature Reviews Molecular Cell Biology*, **2010**, 11, 149-55	48.7	250
134	A guide to simple and informative binding assays. *Molecular Biology of the Cell*, **2010**, 21, 4061-7	3.5	259
133	Mathematical modeling of endocytic actin patch kinetics in fission yeast: disassembly requires release of actin filament fragments. *Molecular Biology of the Cell*, **2010**, 21, 2905-15	3.5	94
132	Quantitative analysis of the mechanism of endocytic actin patch assembly and disassembly in fission yeast. *Molecular Biology of the Cell*, **2010**, 21, 2894-904	3.5	131
131	Molecular dynamics simulations of Arp2/3 complex activation. *Biophysical Journal*, **2010**, 99, 2568-76	2.9	19
130	Regulation of actin polymerization and adhesion-dependent cell edge protrusion by the Abl-related gene (Arg) tyrosine kinase and N-WASp. *Biochemistry*, **2010**, 49, 2227-34	3.2	21
129	Structure and dynamics of the actin filament. *Journal of Molecular Biology*, **2010**, 396, 252-63	6.5	74
128	Mechanics of cytokinesis in eukaryotes. *Current Opinion in Cell Biology*, **2010**, 22, 50-6	9	240
127	Nucleotide-dependent conformational states of actin. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 12723-8	11.5	97
126	Mathematical models and simulations of cellular processes based on actin filaments. *Journal of Biological Chemistry*, **2009**, 284, 5433-7	5.4	41

125	Incompatibility with formin Cdc12p prevents human profilin from substituting for fission yeast profilin: insights from crystal structures of fission yeast profilin. *Journal of Biological Chemistry*, **2009**, 284, 2088-97	5.4	29
124	Energetic requirements for processive elongation of actin filaments by FH1FH2-formins. *Journal of Biological Chemistry*, **2009**, 284, 12533-40	5.4	37
123	Cofilin dissociates Arp2/3 complex and branches from actin filaments. *Current Biology*, **2009**, 19, 537-45	6.3	149
122	Review of the mechanism of processive actin filament elongation by formins. *Cytoskeleton*, **2009**, 66, 606-17		173
121	Actin, a central player in cell shape and movement. *Science*, **2009**, 326, 1208-12	33.3	1340
120	Nucleotide- and activator-dependent structural and dynamic changes of arp2/3 complex monitored by hydrogen/deuterium exchange and mass spectrometry. *Journal of Molecular Biology*, **2009**, 390, 414-27	6.5	12
119	The role of the FH1 domain and profilin in formin-mediated actin-filament elongation and nucleation. *Current Biology*, **2008**, 18, 9-19	6.3	164
118	Nucleotide-mediated conformational changes of monomeric actin and Arp3 studied by molecular dynamics simulations. *Journal of Molecular Biology*, **2008**, 376, 166-83	6.5	43
117	A malaria parasite formin regulates actin polymerization and localizes to the parasite-erythrocyte moving junction during invasion. *Cell Host and Microbe*, **2008**, 3, 188-98	23.4	86
116	Chapter 9: Counting proteins in living cells by quantitative fluorescence microscopy with internal standards. *Methods in Cell Biology*, **2008**, 89, 253-73	1.8	53
115	Influence of phalloidin on the formation of actin filament branches by Arp2/3 complex. *Biochemistry*, **2008**, 47, 6460-7	3.2	14
114	Assembly mechanism of the contractile ring for cytokinesis by fission yeast. *Science*, **2008**, 319, 97-100	33.3	294
113	Leiomodin is an actin filament nucleator in muscle cells. *Science*, **2008**, 320, 239-43	33.3	180
112	Yeast UCS proteins promote actomyosin interactions and limit myosin turnover in cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 8014-9	11.5	31
111	Pathway of actin filament branch formation by Arp2/3 complex. *Journal of Biological Chemistry*, **2008**, 283, 7135-44	5.4	81
110	The structural basis of actin filament branching by the Arp2/3 complex. *Journal of Cell Biology*, **2008**, 180, 887-95	7.3	218
109	Structure and biochemical properties of fission yeast Arp2/3 complex lacking the Arp2 subunit. *Journal of Biological Chemistry*, **2008**, 283, 26490-8	5.4	31
108	Progress towards understanding the mechanism of cytokinesis in fission yeast. *Biochemical Society Transactions*, **2008**, 36, 425-30	5.1	33

107	Molecular basis of cytokinesis in fission yeast. *FASEB Journal*, **2008**, 22, 115.2	0.9	
106	Regulation of actin filament assembly by Arp2/3 complex and formins. *Annual Review of Biophysics and Biomolecular Structure*, **2007**, 36, 451-77		741
105	Polymerization kinetics of ADP- and ADP-Pi-actin determined by fluorescence microscopy. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 8827-32	11.5	150
104	Visualizing Arp2/3 complex activation mediated by binding of ATP and WASp using structural mass spectrometry. *Proceedings of the National Academy of Sciences of the United States of America*, **2007** , 104, 1552-7	11.5	51
103	Insights into the influence of nucleotides on actin family proteins from seven structures of Arp2/3 complex. *Molecular Cell*, **2007**, 26, 449-57	17.6	64
102	Assembly of the cytokinetic contractile ring from a broad band of nodes in fission yeast. *Journal of Cell Biology*, **2006**, 174, 391-402	7.3	219
101	Reconstitution of the transition from lamellipodium to filopodium in a membrane-free system. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 4906-11	11.5	68
100	Kinetics of the formation and dissociation of actin filament branches mediated by Arp2/3 complex. *Biophysical Journal*, **2006**, 91, 3519-28	2.9	58
99	Control of the assembly of ATP- and ADP-actin by formins and profilin. *Cell*, **2006**, 124, 423-35	56.2	434
98	Model of formin-associated actin filament elongation. *Molecular Cell*, **2006**, 21, 455-66	17.6	144
97	Mechanism of actin filament turnover by severing and nucleation at different concentrations of ADF/cofilin. *Molecular Cell*, **2006**, 24, 13-23	17.6	512
96	Counting cytokinesis proteins globally and locally in fission yeast. *Science*, **2005**, 310, 310-4	33.3	440
95	Real-time measurements of actin filament polymerization by total internal reflection fluorescence microscopy. *Biophysical Journal*, **2005**, 88, 1387-402	2.9	323
94	Cytokinesis depends on the motor domains of myosin-II in fission yeast but not in budding yeast. *Molecular Biology of the Cell*, **2005**, 16, 5346-55	3.5	80
93	Profilin-mediated competition between capping protein and formin Cdc12p during cytokinesis in fission yeast. *Molecular Biology of the Cell*, **2005**, 16, 2313-24	3.5	98
92	Interactions of WASp, myosin-I, and verprolin with Arp2/3 complex during actin patch assembly in fission yeast. *Journal of Cell Biology*, **2005**, 170, 637-48	7.3	121
91	UCS protein Rng3p activates actin filament gliding by fission yeast myosin-II. *Journal of Cell Biology*, **2004**, 167, 315-25	7.3	110
90	Insertional assembly of actin filament barbed ends in association with formins produces piconewton forces. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 14725-30	11.5	362

89	Crystal structures of actin-related protein 2/3 complex with bound ATP or ADP. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 15627-32	11.5	72
88	Ray Rappaport chronology: Twenty-five years of seminal papers on cytokinesis in the Journal of Experimental Zoology. *The Journal of Experimental Zoology*, **2004**, 301, 9-14		11
87	Identification of functionally important residues of Arp2/3 complex by analysis of homology models from diverse species. *Journal of Molecular Biology*, **2004**, 336, 551-65	6.5	59
86	Formins coming into focus. *Developmental Cell*, **2004**, 6, 312-4	10.2	13
85	Functional genomics of cell morphology using RNA interference: pick your style, broad or deep. *Journal of Biology*, **2003**, 2, 25		10
84	A conserved amphipathic helix in WASP/Scar proteins is essential for activation of Arp2/3 complex. *Nature Structural and Molecular Biology*, **2003**, 10, 591-8	17.6	121
83	The cytoskeleton, cellular motility and the reductionist agenda. *Nature*, **2003**, 422, 741-5	50.4	232
82	Cellular motility driven by assembly and disassembly of actin filaments. *Cell*, **2003**, 112, 453-65	56.2	3285
81	Spatial and temporal pathway for assembly and constriction of the contractile ring in fission yeast cytokinesis. *Developmental Cell*, **2003**, 5, 723-34	10.2	327
80	The fission yeast cytokinesis formin Cdc12p is a barbed end actin filament capping protein gated by profilin. *Journal of Cell Biology*, **2003**, 161, 875-87	7.3	280
79	Structure and function of the Arp2/3 complex. *Current Opinion in Structural Biology*, **2002**, 12, 768-74	8.1	121
78	Xenopus actin-interacting protein 1 (XAip1) enhances cofilin fragmentation of filaments by capping filament ends. *Journal of Biological Chemistry*, **2002**, 277, 43011-6	5.4	85
77	Hydrolysis of ATP by polymerized actin depends on the bound divalent cation but not profilin. *Biochemistry*, **2002**, 41, 597-602	3.2	139
76	Cellular motility powered by actin filament assembly and disassembly. *Harvey Lectures*, **2002**, 98, 1-17		5
75	Interaction of WASP/Scar proteins with actin and vertebrate Arp2/3 complex. *Nature Cell Biology*, **2001**, 3, 76-82	23.4	254
74	Genomics, the cytoskeleton and motility. *Nature*, **2001**, 409, 842-3	50.4	41
73	The Arp2/3 complex nucleates actin filament branches from the sides of pre-existing filaments. *Nature Cell Biology*, **2001**, 3, 306-10	23.4	168
72	Inhibition of the Arp2/3 complex-nucleated actin polymerization and branch formation by tropomyosin. *Current Biology*, **2001**, 11, 1300-4	6.3	187

71	Structure of Arp2/3 complex in its activated state and in actin filament branch junctions. *Science*, **2001**, 293, 2456-9	33.3	205
70	Crystal structure of Arp2/3 complex. *Science*, **2001**, 294, 1679-84	33.3	413
69	Myosin-I nomenclature. *Journal of Cell Biology*, **2001**, 155, 703-4	7.3	60
68	Regulation of actin filament network formation through ARP2/3 complex: activation by a diverse array of proteins. *Annual Review of Biochemistry*, **2001**, 70, 649-76	29.1	563
67	Profilin binding to poly-L-proline and actin monomers along with ability to catalyze actin nucleotide exchange is required for viability of fission yeast. *Molecular Biology of the Cell*, **2001**, 12, 1161-75	3.5	117
66	Structural biology. ActinSup. *Science*, **2001**, 293, 616-8	33.3	13
65	Direct observation of dendritic actin filament networks nucleated by Arp2/3 complex and WASP/Scar proteins. *Nature*, **2000**, 404, 1007-11	50.4	449
64	Fission yeast myosin-II isoforms assemble into contractile rings at distinct times during mitosis. *Current Biology*, **2000**, 10, 397-400	6.3	70
63	Interactions of ADF/cofilin, Arp2/3 complex, capping protein and profilin in remodeling of branched actin filament networks. *Current Biology*, **2000**, 10, 1273-82	6.3	220
62	Activation by Cdc42 and PIP(2) of Wiskott-Aldrich syndrome protein (WASp) stimulates actin nucleation by Arp2/3 complex. *Journal of Cell Biology*, **2000**, 150, 1311-20	7.3	417
61	Fission yeast myosin-I, Myo1p, stimulates actin assembly by Arp2/3 complex and shares functions with WASp. *Journal of Cell Biology*, **2000**, 151, 789-800	7.3	143
60	Myosin-II tails confer unique functions in Schizosaccharomyces pombe: characterization of a novel myosin-II tail. *Molecular Biology of the Cell*, **2000**, 11, 79-91	3.5	53
59	Polymerization and structure of nucleotide-free actin filaments. *Journal of Molecular Biology*, **2000**, 295, 517-26	6.5	57
58	Molecular mechanisms controlling actin filament dynamics in nonmuscle cells. *Annual Review of Biophysics and Biomolecular Structure*, **2000**, 29, 545-76		1144
57	Phosphorylation of Acanthamoeba actophorin (ADF/cofilin) blocks interaction with actin without a change in atomic structure. *Journal of Molecular Biology*, **2000**, 295, 203-11	6.5	59
56	Mechanism of interaction of Acanthamoeba actophorin (ADF/Cofilin) with actin filaments. *Journal of Biological Chemistry*, **1999**, 274, 15538-46	5.4	238
55	Structure and function of the Arp2/3 complex. *Current Opinion in Structural Biology*, **1999**, 9, 244-9	8.1	98
54	Rho-family GTPases require the Arp2/3 complex to stimulate actin polymerization in Acanthamoeba extracts. *Current Biology*, **1999**, 9, 405-15	6.3	64

53	Effect of capping protein, CapZ, on the length of actin filaments and mechanical properties of actin filament networks. *Cytoskeleton*, **1999**, 42, 73-81		45
52	Annealing accounts for the length of actin filaments formed by spontaneous polymerization. *Biophysical Journal*, **1999**, 77, 2911-9	2.9	107
51	Influence of the C terminus of Wiskott-Aldrich syndrome protein (WASp) and the Arp2/3 complex on actin polymerization. *Biochemistry*, **1999**, 38, 15212-22	3.2	243
50	Effect of capping protein, CapZ, on the length of actin filaments and mechanical properties of actin filament networks **1999**, 42, 73		1
49	Interactions of Acanthamoeba profilin with actin and nucleotides bound to actin. *Biochemistry*, **1998**, 37, 10871-80	3.2	137
48	Three-dimensional structure of Acanthamoeba castellanii myosin-IB (MIB) determined by cryoelectron microscopy of decorated actin filaments. *Journal of Cell Biology*, **1998**, 141, 155-62	7.3	23
47	Arp2/3 complex from Acanthamoeba binds profilin and cross-links actin filaments. *Molecular Biology of the Cell*, **1998**, 9, 841-52	3.5	80
46	Interaction of actin monomers with Acanthamoeba actophorin (ADF/cofilin) and profilin. *Journal of Biological Chemistry*, **1998**, 273, 25106-11	5.4	143
45	Dynamic cross-linking by alpha-actinin determines the mechanical properties of actin filament networks. *Journal of Biological Chemistry*, **1998**, 273, 9570-6	5.4	152
44	Structure, subunit topology, and actin-binding activity of the Arp2/3 complex from Acanthamoeba. *Journal of Cell Biology*, **1997**, 136, 331-43	7.3	194
43	Identification of a second myosin-II in Schizosaccharomyces pombe: Myp2p is conditionally required for cytokinesis. *Molecular Biology of the Cell*, **1997**, 8, 2693-705	3.5	148
42	A subset of protein kinase C phosphorylation sites on the myosin II regulatory light chain inhibits phosphorylation by myosin light chain kinase. *Biochemistry*, **1997**, 36, 2063-7	3.2	28
41	Crystal structure of the actin-binding protein actophorin from Acanthamoeba. *Nature Structural and Molecular Biology*, **1997**, 4, 369-73	17.6	66
40	Structural requirements and thermodynamics of the interaction of proline peptides with profilin. *Biochemistry*, **1996**, 35, 16535-43	3.2	102
39	Characterization of actin and poly-L-proline binding sites of Acanthamoeba profilin with monoclonal antibodies and by mutagenesis. *Journal of Molecular Biology*, **1996**, 256, 89-107	6.5	31
38	Kinetics and thermodynamics of phalloidin binding to actin filaments from three divergent species. *Biochemistry*, **1996**, 35, 14054-61	3.2	80
37	The chemical mechanism of myosin-I: implications for actin-based motility and the evolution of the myosin family of motor proteins. *Cell Structure and Function*, **1996**, 21, 351-6	2.2	10
36	Nucleotide-free actin: stabilization by sucrose and nucleotide binding kinetics. *Biochemistry*, **1995**, 34, 5452-61	3.2	58

35	Elucidation of the poly-L-proline binding site in Acanthamoeba profilin I by NMR spectroscopy. *FEBS Letters*, **1994**, 337, 145-51	3.8	54
34	Transient kinetic analysis of rhodamine phalloidin binding to actin filaments. *Biochemistry*, **1994**, 33, 14387-92	3.2	79
33	Microinjection into Acanthamoeba castellanii of monoclonal antibodies to myosin-II slows but does not stop cell locomotion. *Cytoskeleton*, **1989**, 12, 42-52		37
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