Henry N Higgs

List of Publications by Year
in descending order

90 papers	11,597 citations	47006 47 h-index	51608 86 g-index
99 all docs	99 docs citations	99 times ranked	9718 citing authors

#	Article	IF	Citations
1	An Actin-Dependent Step in Mitochondrial Fission Mediated by the ER-Associated Formin INF2. Science, 2013, 339, 464-467.	12.6	665
2	The many faces of actin: matching assembly factors with cellular structures. Nature Cell Biology, 2007, 9, 1110-1121.	10.3	653
3	Regulation of Actin Filament Network Formation Through ARP2/3 Complex: Activation by a Diverse Array of Proteins. Annual Review of Biochemistry, 2001, 70, 649-676.	11.1	608
4	The Human Androgen Receptor: Complementary Deoxyribonucleic Acid Cloning, Sequence Analysis and Gene Expression in Prostate. Molecular Endocrinology, 1988, 2, 1265-1275.	3.7	555
5	Control of the Assembly of ATP- and ADP-Actin by Formins and Profilin. Cell, 2006, 124, 423-435.	28.9	509
6	Direct observation of dendritic actin filament networks nucleated by Arp2/3 complex and WASP/Scar proteins. Nature, 2000, 404, 1007-1011.	27.8	502
7	Crystal Structure of Arp2/3 Complex. Science, 2001, 294, 1679-1684.	12.6	484
8	Activation by Cdc42 and Pip2 of Wiskott-Aldrich Syndrome Protein (Wasp) Stimulates Actin Nucleation by Arp2/3 Complex. Journal of Cell Biology, 2000, 150, 1311-1320.	5.2	453
9	The Mouse Formin mDia1 Is a Potent Actin Nucleation Factor Regulated by Autoinhibition. Current Biology, 2003, 13, 1335-1340.	3.9	389
10	Mutations in the formin gene INF2 cause focal segmental glomerulosclerosis. Nature Genetics, 2010, 42, 72-76.	21.4	381
11	Formin proteins: a domain-based approach. Trends in Biochemical Sciences, 2005, 30, 342-353.	7.5	342
12	Interaction of WASP/Scar proteins with actin and vertebrate Arp2/3 complex. Nature Cell Biology, 2001, 3, 76-82.	10.3	293
13	Ena/VASP Proteins Enhance Actin Polymerization in the Presence of Barbed End Capping Proteins. Journal of Biological Chemistry, 2005, 280, 28653-28662.	3.4	275
14	Influence of the C Terminus of Wiskott-Aldrich Syndrome Protein (WASp) and the Arp2/3 Complex on Actin Polymerizationâ€. Biochemistry, 1999, 38, 15212-15222.	2.5	256
15	Actin filaments target the oligomeric maturation of the dynamin GTPase Drp1 to mitochondrial fission sites. ELife, 2015, 4, e11553.	6.0	252
16	Phylogenetic Analysis of the Formin Homology 2 Domain. Molecular Biology of the Cell, 2005, 16, 1-13.	2.1	249
17	INF2-mediated actin polymerization at the ER stimulates mitochondrial calcium uptake, inner membrane constriction, and division. Journal of Cell Biology, 2018, 217, 251-268.	5.2	246
18	Regulation of Actin Polymerization by Arp2/3 Complex and WASp/Scar Proteins. Journal of Biological Chemistry, 1999, 274, 32531-32534.	3.4	229

#	Article	IF	Citations
19	A Role for Myosin II in Mammalian Mitochondrial Fission. Current Biology, 2014, 24, 409-414.	3.9	212
20	The Mouse Formin, FRLÎ±, Slows Actin Filament Barbed End Elongation, Competes with Capping Protein, Accelerates Polymerization from Monomers, and Severs Filaments. Journal of Biological Chemistry, 2004, 279, 20076-20087.	3.4	184
21	INF2 Is a WASP Homology 2 Motif-containing Formin That Severs Actin Filaments and Accelerates Both Polymerization and Depolymerization. Journal of Biological Chemistry, 2006, 281, 26754-26767.	3.4	169
22	The Arp2/3 complex is essential for the actin-based motility of Listeria monocytogenes. Current Biology, 1999, 9, 759-762.	3.9	164
23	Dissecting Requirements for Auto-inhibition of Actin Nucleation by the Formin, mDia1. Journal of Biological Chemistry, 2005, 280, 6986-6992.	3.4	164
24	Connecting the Cytoskeleton to the Endoplasmic Reticulum and Golgi. Current Biology, 2014, 24, R660-R672.	3.9	158
25	Interactions ofAcanthamoebaProfilin with Actin and Nucleotides Bound to Actinâ€. Biochemistry, 1998, 37, 10871-10880.	2.5	152
26	Mechanistic Differences in Actin Bundling Activity of Two Mammalian Formins, FRL1 and mDia2. Journal of Biological Chemistry, 2006, 281, 14383-14392.	3.4	152
27	Lymphocyte microvilli are dynamic, actin-dependent structures that do not require Wiskott-Aldrich syndrome protein (WASp) for their morphology. Blood, 2004, 104, 1396-1403.	1.4	140
28	Novel roles for actin in mitochondrial fission. Journal of Cell Science, 2014, 127, 4549-60.	2.0	128
29	Calcium-mediated actin reset (CaAR) mediates acute cell adaptations. ELife, 2016, 5, .	6.0	121
30	Dia-Interacting Protein Modulates Formin-Mediated Actin Assembly at the Cell Cortex. Current Biology, 2007, 17, 579-591.	3.9	120
31	INF2 is an endoplasmic reticulum-associated formin protein. Journal of Cell Science, 2009, 122, 1430-1440.	2.0	118
32	Differential interactions of the formins INF2, mDia1, and mDia2 with microtubules. Molecular Biology of the Cell, 2011, 22, 4575-4587.	2.1	113
33	Receptor-mediated Drp1 oligomerization on endoplasmic reticulum. Journal of Cell Biology, 2017, 216, 4123-4139.	5.2	98
34	Long-Term Potentiation Requires a Rapid Burst of Dendritic Mitochondrial Fission during Induction. Neuron, 2018, 100, 860-875.e7.	8.1	97
35	DIAPH3 governs the cellular transition to the amoeboid tumour phenotype. EMBO Molecular Medicine, 2012, 4, 743-760.	6.9	92
36	Actin filaments as dynamic reservoirs for Drp1 recruitment. Molecular Biology of the Cell, 2016, 27, 3109-3121.	2.1	91

#	Article	IF	Citations
37	Cloning of a Phosphatidic Acid-preferring Phospholipase A1 from Bovine Testis. Journal of Biological Chemistry, 1998, 273, 5468-5477.	3.4	82
38	Splice variantâ€“specific cellular function of the formin INF2 in maintenance of Golgi architecture. Molecular Biology of the Cell, 2011, 22, 4822-4833.	2.1	78
39	Assembly of filopodia by the formin FRL2 (FMNL3). Cytoskeleton, 2010, 67, 755-772.	2.0	74
40	Rho activation of mDia formins is modulated by an interaction with inverted formin 2 (INF2). Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 2933-2938.	7.1	74
41	Actin Dynamics: Growth from Dendritic Branches. Current Biology, 2005, 15, R346-R357.	3.9	68
42	Tropomyosin Regulates Elongation by Formin at the Fast-Growing End of the Actin Filament. Biochemistry, 2007, 46, 8146-8155.	2.5	67
43	Arp2 depletion inhibits sheetâ€like protrusions but not linear protrusions of fibroblasts and lymphocytes. Cytoskeleton, 2008, 65, 904-922.	4.4	61
44	Purification and Properties of a Phosphatidic Acid-preferring Phospholipase A1 from Bovine Testis. Journal of Biological Chemistry, 1996, 271, 10874-10883.	3.4	58
45	The C Terminus of Formin FMNL3 Accelerates Actin Polymerization and Contains a WH2 Domain-like Sequence That Binds Both Monomers and Filament Barbed Ends. Journal of Biological Chemistry, 2012, 287, 3087-3098.	3.4	57
46	FMNL3 FH2â€“actin structure gives insight into formin-mediated actin nucleation and elongation. Nature Structural and Molecular Biology, 2013, 20, 111-118.	8.2	54
47	The Filamentous Actin Cross-Linking/Bundling Activity of Mammalian Formins. Journal of Molecular Biology, 2008, 384, 324-334.	4.2	52
48	Cell typeâ€“dependent mechanisms for formin-mediated assembly of filopodia. Molecular Biology of the Cell, 2015, 26, 4646-4659.	2.1	51
49	A complex containing lysine-acetylated actin inhibits the formin INF2. Nature Cell Biology, 2019, 21, 592-602.	10.3	49
50	Inverted Formin 2 Regulates Actin Dynamics by Antagonizing Rho/Diaphanous-related Formin Signaling. Journal of the American Society of Nephrology: JASN, 2013, 24, 917-929.	6.1	48
51	Actin Monomers Activate Inverted Formin 2 by Competing with Its Autoinhibitory Interaction. Journal of Biological Chemistry, 2013, 288, 26847-26855.	3.4	48
52	INF2-Mediated Severing through Actin Filament Encirclement and Disruption. Current Biology, 2014, 24, 156-164.	3.9	48
53	The Verprolin-like Central (VC) Region of Wiskott-Aldrich Syndrome Protein Induces Arp2/3 Complex-dependent Actin Nucleation. Journal of Biological Chemistry, 2001, 276, 35761-35767.	3.4	46
54	The novel formin FMNL3 is a cytoskeletal regulator of angiogenesis.. Journal of Cell Science, 2012, 125, 1420-8.	2.0	46

#	Article	IF	Citations
55	Biochemical Analysis of Mammalian Formin Effects on Actin Dynamics. Methods in Enzymology, 2006, 406, 190-214.	1.0	45
56	Multiple roles for actin in secretory and endocytic pathways. Current Biology, 2021, 31, R603-R618.	3.9	45
57	Bi-modal Regulation of a Formin by srGAP2. Journal of Biological Chemistry, 2011, 286, 6577-6586.	3.4	40
58	Mice with mutant Inf2 show impaired podocyte and slit diaphragm integrity in response to protamine-induced kidney injury. Kidney International, 2016, 90, 363-372.	5.2	40
59	Coactosin-Like 1 Antagonizes Cofilin to Promote Lamellipodial Protrusion at the Immune Synapse. PLoS ONE, 2014, 9, e85090.	2.5	39
60	Mutations to the Formin Homology 2 Domain of INF2 Protein Have Unexpected Effects on Actin Polymerization and Severing. Journal of Biological Chemistry, 2012, 287, 34234-34245.	3.4	38
61	The formin FMNL3 assembles plasma membrane protrusions that participate in cellâ€“cell adhesion. Molecular Biology of the Cell, 2015, 26, 467-477.	2.1	38
62	Regulation of INF2-mediated actin polymerization through site-specific lysine acetylation of actin itself. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 439-447.	7.1	35
63	Focal Adhesions Undergo Longitudinal Splitting into Fixed-Width Units. Current Biology, 2018, 28, 2033-2045.e5.	3.9	29
64	Two distinct actin filament populations have effects on mitochondria, with differences in stimuli and assembly factors. Journal of Cell Science, 2019, 132, .	2.0	29
65	Cdc42-induced actin filaments are protected from capping protein. Current Biology, 1999, 9, 979-S2.	3.9	28
66	Roles for Ena/VASP proteins in FMNL3-mediated filopodial assembly. Journal of Cell Science, 2018, 131, .	2.0	28
67	Assembly and Turnover of Short Actin Filaments by the Formin INF2 and Profilin. Journal of Biological Chemistry, 2015, 290, 22494-22506.	3.4	27
68	Purification of Recombinant Acyl-Coenzyme A:Cholesterol Acyltransferase 1 (ACAT1) from H293 Cells and Binding Studies between the Enzyme and Substrates Using Difference Intrinsic Fluorescence Spectroscopy. Biochemistry, 2010, 49, 9957-9963.	2.5	24
69	Isoform-Selective Chemical Inhibition of mDia-Mediated Actin Assembly. Biochemistry, 2009, 48, 9327-9329.	2.5	23
70	Monitoring ATP hydrolysis and ATPase inhibitor screening using¹H NMR. Chemical Communications, 2014, 50, 12037-12039.	4.1	21
71	Revolutionary view of two ways to split a mitochondrion. Nature, 2021, 593, 346-347.	27.8	20
72	Lysine acetylation of cytoskeletal proteins: Emergence of an actin code. Journal of Cell Biology, 2020, 219, .	5.2	19

#	Article	IF	Citations
73	Mff oligomerization is required for Drp1 activation and synergy with actin filaments during mitochondrial division. Molecular Biology of the Cell, 2021, 32, ar5.	2.1	18
74	Tumor microtubes connect pancreatic cancer cells in an Arp2/3 complex-dependent manner. Molecular Biology of the Cell, 2020, 31, 1259-1272.	2.1	17
75	FSGS-Causing INF2 Mutation Impairs Cleaved INF2 N-Fragment Functions in Podocytes. Journal of the American Society of Nephrology: JASN, 2020, 31, 374-391.	6.1	17
76	Discussing the morphology of actin filaments in lamellipodia. Trends in Cell Biology, 2011, 21, 2-4.	7.9	16
77	There goes the neighbourhood: Eps8 joins the barbed-end crowd. Nature Cell Biology, 2004, 6, 1147-1149.	10.3	13
78	Actin nucleation: Nucleation-promoting factors are not all equal. Current Biology, 2001, 11, R1009-R1012.	3.9	12
79	Listeria Motility: Biophysics Pushes Things Forward. Current Biology, 2003, 13, R302-R304.	3.9	11
80	Parallel kinase pathways stimulate actin polymerization at depolarized mitochondria. Current Biology, 2022, 32, 1577-1592.e8.	3.9	11
81	Membrane Lipids Have Multiple Effects on Interfacial Catalysis by a Phosphatidic Acid-Preferring Phospholipase A1 from Bovine Testisâ€. Biochemistry, 2000, 39, 9335-9344.	2.5	10
82	Function-Oriented Studies Targeting Pectenotoxin 2: Synthesis of the GH-Ring System and a Structurally Simplified Macrolactone. Organic Letters, 2017, 19, 5154-5157.	4.6	10
83	Nanostructured Self-Assembly of Inverted Formin 2 (INF2) and F-Actinâ€“INF2 Complexes Revealed by Atomic Force Microscopy. Langmuir, 2014, 30, 7533-7539.	3.5	9
84	Actin Nucleation: Cortactin Caught in the Act. Current Biology, 2002, 12, R593-R595.	3.9	5
85	SEC24A facilitates colocalization and Ca2+ flux between the endoplasmic reticulum and mitochondria. Journal of Cell Science, 2021, 134, .	2.0	3
86	A fruitful tree: developing the dendritic nucleation model of actin-based cell motility. Molecular Biology of the Cell, 2018, 29, 2969-2978.	2.1	2
87	The harder the better: effects of substrate rigidity on cell motility. Trends in Biochemical Sciences, 2000, 25, 427.	7.5	0
88	Tools for â€˜The Sceptical Chymistâ€™: measuring macromolecular interaction kinetics in live cells by TIRâ€“FRAP. Trends in Biochemical Sciences, 2000, 25, 540-541.	7.5	0
89	Spectres of spectrin: molecular modeling and hemolytic disease. Trends in Biochemical Sciences, 2001, 26, 702.	7.5	0
90	The Pollard lab at Salk: moving the leading edge forward. Biophysical Reviews, 2018, 10, 1487-1490.	3.2	0