Holly V Goodson

List of Publications by Year
in descending order

75 papers	5,830 citations	136950 32 h-index	88630 70 g-index
85 all docs	85 docs citations	85 times ranked	7023 citing authors

#	Article	IF	Citations
1	Quantification of microtubule stutters: dynamic instability behaviors that are strongly associated with catastrophe. Molecular Biology of the Cell, 2022, 33, mbcE20060348.	2.1	10
2	The CLIP-170 N-terminal domain binds directly to both F-actin and microtubules in a mutually exclusive manner. Journal of Biological Chemistry, 2022, 298, 101820.	3.4	0
3	Yeast grown in continuous culture systems can detect mutagens with improved sensitivity relative to the Ames test. PLoS ONE, 2021, 16, e0235303.	2.5	3
4	Cytoskeletal diversification across 1 billion years: What red algae can teach us about the cytoskeleton, and vice versa. BioEssays, 2021, 43, 2000278.	2.5	4
5	Characterizing bioavailable phosphorus concentrations in an agricultural stream during hydrologic and streambed disturbances. Biogeochemistry, 2021, 154, 509-524.	3.5	8
6	Development of a Yeast-Based Assay for Bioavailable Phosphorus. ACS ES&T Water, 2021, 1, 2020-2028.	4.6	0
7	CLIP-170S is a microtubuleÂ+TIP variant that confers resistance to taxanes by impairing drug-target engagement. Developmental Cell, 2021, 56, 3264-3275.e7.	7.0	5
8	Overexpression of the microtubule-binding protein CLIP-170 induces a +TIP network superstructure consistent with a biomolecular condensate. PLoS ONE, 2021, 16, e0260401.	2.5	14
9	Behaviors of individual microtubules and microtubule populations relative to critical concentrations: dynamic instability occurs when critical concentrations are driven apart by nucleotide hydrolysis. Molecular Biology of the Cell, 2020, 31, 589-618.	2.1	14
10	â€œScentsorâ€ A Whole-Cell Yeast Biosensor with an Olfactory Reporter for Low-Cost and Equipment-Free Detection of Pharmaceuticals. ACS Sensors, 2020, 5, 3025-3030.	7.8	8
11	Development of a paper-immobilized yeast biosensor for the detection of physiological concentrations of doxycycline in technology-limited settings. Analytical Methods, 2020, 12, 2123-2132.	2.7	15
12	Using STADIA to quantify dynamic instability in microtubules. Methods in Cell Biology, 2020, 158, 117-143.	1.1	2
13	Relationship between dynamic instability of individual microtubules and flux of subunits into and out of polymer. Cytoskeleton, 2019, 76, 495-516.	2.0	6
14	Developing Evolutionary Cell Biology. Developmental Cell, 2018, 47, 395-396.	7.0	5
15	Microtubules and Microtubule-Associated Proteins. Cold Spring Harbor Perspectives in Biology, 2018, 10, a022608.	5.5	312
16	An evolutionary perspective on cell migration: Digging for the roots of amoeboid motility. Journal of Cell Biology, 2017, 216, 1509-1511.	5.2	9
17	Interactions between Tau and Different Conformations of Tubulin: Implications for Tau Function and Mechanism. Journal of Molecular Biology, 2017, 429, 1424-1438.	4.2	59
18	Insights into the red algae and eukaryotic evolution from the genome of <i>Porphyra umbilicalis</i> (Bangiophyceae, Rhodophyta). Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E6361-E6370.	7.1	233

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19	Whole blood clot optical clearing for nondestructive 3D imaging and quantitative analysis. Biomedical Optics Express, 2017, 8, 3671.	2.9	12
20	Measuring Tauâ€“microtubule affinity through cosedimentation assays. Methods in Cell Biology, 2017, 141, 115-134.	1.1	9
21	MyTH4-FERM myosins have an ancient and conserved role in filopod formation. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E8059-E8068.	7.1	24
22	Interactions between the Microtubule Binding Protein EB1 and F-Actin. Journal of Molecular Biology, 2016, 428, 1304-1314.	4.2	21
23	Incorporating yeast biosensors into paper-based analytical tools for pharmaceutical analysis. Analytical and Bioanalytical Chemistry, 2015, 407, 615-619.	3.7	27
24	Evolutionary cell biology: Two origins, one objective. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 16990-16994.	7.1	108
25	Promoting microtubule assembly: A hypothesis for the functional significance of the +TIP network. BioEssays, 2014, 36, 818-826.	2.5	25
26	Microtubule dynamic instability: the role of cracks between protofilaments. Soft Matter, 2014, 10, 2069-2080.	2.7	14
27	Using MTBindingSim as a Tool for Experimental Planning and Interpretation. Methods in Cell Biology, 2013, 115, 375-384.	1.1	0
28	Bringing Biology to Freshmen Engineering Students: The Approach Implemented at Notre Dame. Cellular and Molecular Bioengineering, 2013, 6, 460-468.	2.1	0
29	Mechanism for the catastrophe-promoting activity of the microtubule destabilizer Op18/stathmin. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 20449-20454.	7.1	66
30	p21-Activated Kinase 1 Regulates Microtubule Dynamics by Phosphorylating Tubulin Cofactor B. Molecular and Cellular Biology, 2013, 33, 1267-1267.	2.3	1
31	Biochemical evidence that human EB1 does not bind preferentially to the microtubule seam. Cytoskeleton, 2013, 70, 317-327.	2.0	9
32	Taxol-stabilized microtubules promote the formation of filaments from unmodified full-length Tau in vitro. Molecular Biology of the Cell, 2012, 23, 4796-4806.	2.1	18
33	The mechanisms of microtubule catastrophe and rescue: implications from analysis of a dimer-scale computational model. Molecular Biology of the Cell, 2012, 23, 642-656.	2.1	100
34	MTBindingSim: simulate protein binding to microtubules. Bioinformatics, 2012, 28, 441-443.	4.1	3
35	Quantitative Comparison of the Efficacy of Various Compounds in Lowering Intracellular Cholesterol Levels in Niemann-Pick Type C Fibroblasts. PLoS ONE, 2012, 7, e48561.	2.5	26
36	Mean-field study of the role of lateral cracks in microtubule dynamics. Physical Review E, 2011, 83, 041905.	2.1	20

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37	Generation of Stable Cell Lines Expressing GFP-Tubulin and Photoactivatable-GFP-Tubulin and Characterization of Clones. Cold Spring Harbor Protocols, 2010, 2010, pdb.prot5480.	0.3	5
38	Methods for Expressing and Analyzing GFP-Tubulin and GFP-Microtubule-Associated Proteins. Cold Spring Harbor Protocols, 2010, 2010, pdb.top85.	0.3	17
39	Effect of GFP tags on the localization of EB1 and EB1 fragments <i>in vivo</i>. Cytoskeleton, 2010, 67, 1-12.	2.0	63
40	Syntheses and biological evaluation of ring-C modified colchicine analogs. Bioorganic and Medicinal Chemistry Letters, 2010, 20, 3831-3833.	2.2	29
41	Using Computational Modeling to Understand Microtubule Dynamics. Methods in Cell Biology, 2010, 95, 175-188.	1.1	5
42	Probing Interactions between CLIP-170, EB1, and Microtubules. Journal of Molecular Biology, 2010, 395, 1049-1062.	4.2	26
43	Interactions between EB1 and Microtubules. Journal of Biological Chemistry, 2009, 284, 32651-32661.	3.4	44
44	Minimal Plus-end Tracking Unit of the Cytoplasmic Linker Protein CLIP-170. Journal of Biological Chemistry, 2009, 284, 6735-6742.	3.4	32
45	Interactions of 40LoVe within the ribonucleoprotein complex that forms on the localization element of Xenopus Vg1 mRNA. Mechanisms of Development, 2009, 126, 523-538.	1.7	17
46	Microtubule assembly dynamics: new insights at the nanoscale. Current Opinion in Cell Biology, 2008, 20, 64-70.	5.4	57
47	CLASPing the Cell Cortex. Developmental Cell, 2006, 11, 4-5.	7.0	1
48	The CLIPâ€•170 Orthologue Bik1p and Positioning the Mitotic Spindle in Yeast. Current Topics in Developmental Biology, 2006, 76, 49-87.	2.2	37
49	Insights into cytoskeletal behavior from computational modeling of dynamic microtubules in a cell-like environment. Journal of Cell Science, 2006, 119, 4781-4788.	2.0	53
50	Multiplying myosins. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 3498-3499.	7.1	18
51	Analysis of a mesoscopic stochastic model of microtubule dynamic instability. Physical Review E, 2006, 74, 041920.	2.1	34
52	Endocytosis Resumes during Late Mitosis and Is Required for Cytokinesis. Journal of Biological Chemistry, 2005, 280, 41628-41635.	3.4	106
53	Receptor for Retrograde Transport in the Apicomplexan Parasite Toxoplasma gondii. Eukaryotic Cell, 2005, 4, 432-442.	3.4	33
54	Interactions between CLIP-170, Tubulin, and Microtubules: Implications for the Mechanism of CLIP-170 Plus-End Tracking Behavior. Molecular Biology of the Cell, 2005, 16, 5373-5384.	2.1	75

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55	p21-Activated Kinase 1 Regulates Microtubule Dynamics by Phosphorylating Tubulin Cofactor B. Molecular and Cellular Biology, 2005, 25, 3726-3736.	2.3	101
56	Conformational changes in CLIP-170 regulate its binding to microtubules and dynactin localization. Journal of Cell Biology, 2004, 166, 1003-1014.	5.2	159
57	Actin and ARPs: action in the nucleus. Trends in Cell Biology, 2004, 14, 435-442.	7.9	105
58	A standardized kinesin nomenclature. Journal of Cell Biology, 2004, 167, 19-22.	5.2	662
59	Molecular Evolution of the Histone Deacetylase Family: Functional Implications of Phylogenetic Analysis. Journal of Molecular Biology, 2004, 338, 17-31.	4.2	1,254
60	Apoptosis of human breast carcinoma cells in the presence of disialosyl gangliosides: II. Treatment of SKBR3 cells with GD3 and GD1b gangliosides. Glycoconjugate Journal, 2003, 20, 319-330.	2.7	22
61	CLIP-170 interacts with dynactin complex and the APC-binding protein EB1 by different mechanisms. Cytoskeleton, 2003, 55, 156-173.	4.4	59
62	CLIPR-59, a new trans-Golgi/TGN cytoplasmic linker protein belonging to the CLIP-170 family. Journal of Cell Biology, 2002, 156, 631-642.	5.2	55
63	Late endosome motility depends on lipids via the small GTPase Rab7. EMBO Journal, 2002, 21, 1289-1300.	7.8	296
64	Molecular evolution of the actin family. Journal of Cell Science, 2002, 115, 2619-2622.	2.0	109
65	Molecular evolution of the actin family. Journal of Cell Science, 2002, 115, 2619-22.	2.0	80
66	Analysis of Dynactin Subcomplexes Reveals a Novel Actin-Related Protein Associated with the Arp1 Minifilament Pointed End. Journal of Cell Biology, 1999, 147, 307-320.	5.2	143
67	Dynamic Localization of CLIP-170 to Microtubule Plus Ends Is Coupled to Microtubule Assembly. Journal of Cell Biology, 1999, 144, 99-112.	5.2	116
68	Specialized conservation of surface loops of myosin: evidence that loops are involved in determining functional characteristics 1 1Edited by G. Von Heijne. Journal of Molecular Biology, 1999, 287, 173-185.	4.2	63
69	Motors and membrane traffic. Current Opinion in Cell Biology, 1997, 9, 18-28.	5.4	184
70	A myosin family reunion. Journal of Muscle Research and Cell Motility, 1996, 17, 7-22.	2.0	61
71	Synthetic lethality screen identifies a novel yeast myosin I gene (MYO5): myosin I proteins are required for polarization of the actin cytoskeleton.. Journal of Cell Biology, 1996, 133, 1277-1291.	5.2	219
72	Identification and molecular characterization of a yeast myosin I. Cytoskeleton, 1995, 30, 73-84.	4.4	79

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73	Molecular evolution of the myosin family: relationships derived from comparisons of amino acid sequences.. Proceedings of the National Academy of Sciences of the United States of America, 1993, 90, 659-663.	7.1	160
74	Nuclear Protein Transpor. Critical Reviews in Biochemistry and Molecular Biology, 1989, 24, 419-435.	5.2	52
75	Teaching Proteinâ€"Ligand Interactions Using a Case Study on Tau in Alzheimerâ€™s Disease. Journal of Chemical Education, 0, , .	2.3	1