Anthony A Hyman

List of Publications by Year in descending order

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225 papers 50,751 citations

112 h-index 207 g-index

240 all docs

240 does citations

times ranked

240

36977 citing authors

#	Article	IF	CITATIONS
1	Biomolecular condensates: organizers of cellular biochemistry. Nature Reviews Molecular Cell Biology, 2017, 18, 285-298.	16.1	3,771
2	Germline P Granules Are Liquid Droplets That Localize by Controlled Dissolution/Condensation. Science, 2009, 324, 1729-1732.	6.0	2,267
3	Liquid-Liquid Phase Separation in Biology. Annual Review of Cell and Developmental Biology, 2014, 30, 39-58.	4.0	2,234
4	A Liquid-to-Solid Phase Transition of the ALS Protein FUS Accelerated by Disease Mutation. Cell, 2015, 162, 1066-1077.	13.5	2,182
5	A Molecular Grammar Governing the Driving Forces for Phase Separation of Prion-like RNA Binding Proteins. Cell, 2018, 174, 688-699.e16.	13.5	1,372
6	A Human Interactome in Three Quantitative Dimensions Organized by Stoichiometries and Abundances. Cell, 2015, 163, 712-723.	13.5	1,132
7	Active liquid-like behavior of nucleoli determines their size and shape in <i>Xenopus laevis</i> oocytes. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 4334-4339.	3.3	1,004
8	Functional genomic analysis of cell division in C. elegans using RNAi of genes on chromosome III. Nature, 2000, 408, 331-336.	13.7	854
9	RNA buffers the phase separation behavior of prion-like RNA binding proteins. Science, 2018, 360, 918-921.	6.0	837
10	Phenotypic profiling of the human genome by time-lapse microscopy reveals cell division genes. Nature, 2010, 464, 721-727.	13.7	768
11	Quantitative Interaction Proteomics and Genome-wide Profiling of Epigenetic Histone Marks and Their Readers. Cell, 2010, 142, 967-980.	13.5	710
12	ATP as a biological hydrotrope. Science, 2017, 356, 753-756.	6.0	677
13	Dynamics and mechanics of the microtubule plus end. Nature, 2003, 422, 753-758.	13.7	666
14	Hydrostatic pressure and the actomyosin cortex drive mitotic cell rounding. Nature, 2011, 469, 226-230.	13.7	576
15	BAC TransgeneOmics: a high-throughput method for exploration of protein function in mammals. Nature Methods, 2008, 5, 409-415.	9.0	568
16	RNA-Induced Conformational Switching and Clustering of G3BP Drive Stress Granule Assembly by Condensation. Cell, 2020, 181, 346-361.e17.	13.5	557
17	Biomolecular condensates at the nexus of cellular stress, protein aggregation disease and ageing. Nature Reviews Molecular Cell Biology, 2021, 22, 196-213.	16.1	535
18	Phase separation of a yeast prion protein promotes cellular fitness. Science, 2018, 359, .	6.0	534

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19	The Centrosome Is a Selective Condensate that Nucleates Microtubules by Concentrating Tubulin. Cell, 2017, 169, 1066-1077.e10.	13.5	533
20	Visualizing the molecular sociology at the HeLa cell nuclear periphery. Science, 2016, 351, 969-972.	6.0	493
21	Polarity controls forces governing asymmetric spindle positioning in the Caenorhabditis elegans embryo. Nature, 2001, 409, 630-633.	13.7	484
22	XMAP215 Is a Processive Microtubule Polymerase. Cell, 2008, 132, 79-88.	13.5	479
23	Systematic Analysis of Human Protein Complexes Identifies Chromosome Segregation Proteins. Science, 2010, 328, 593-599.	6.0	465
24	The spindle: a dynamic assembly of microtubules and motors. Nature Cell Biology, 2001, 3, E28-E34.	4.6	448
25	Rab5 regulates motility of early endosomes on microtubules. Nature Cell Biology, 1999, 1, 376-382.	4.6	433
26	Yeast kinesin-8 depolymerizes microtubules in a length-dependent manner. Nature Cell Biology, 2006, 8, 957-962.	4.6	426
27	Cytoplasmic Dynein Is Required for Distinct Aspects of Mtoc Positioning, Including Centrosome Separation, in the One Cell Stage Caenorhabditis elegans Embryo. Journal of Cell Biology, 1999, 147, 135-150.	2.3	419
28	Binding of the adenomatous polyposis coli protein to microtubules increases microtubule stability and is regulated by $GSK3^2$ phosphorylation. Current Biology, 2001, 11, 44-49.	1.8	417
29	Functional Analysis of Kinetochore Assembly in Caenorhabditis elegans. Journal of Cell Biology, 2001, 153, 1209-1226.	2.3	416
30	Aurora-A kinase is required for centrosome maturation in Caenorhabditis elegans. Journal of Cell Biology, 2001, 155, 1109-1116.	2.3	395
31	Ki-67 acts as a biological surfactant to disperse mitotic chromosomes. Nature, 2016, 535, 308-312.	13.7	392
32	An aberrant phase transition of stress granules triggered by misfolded protein and prevented by chaperone function. EMBO Journal, 2017, 36, 1669-1687.	3.5	370
33	Centriole assembly in Caenorhabditis elegans. Nature, 2006, 444, 619-623.	13.7	358
34	Cyk-4. Journal of Cell Biology, 2000, 149, 1391-1404.	2.3	356
35	The Distribution of Active Force Generators Controls Mitotic Spindle Position. Science, 2003, 301, 518-521.	6.0	351
36	A Systematic Mammalian Genetic Interaction Map Reveals Pathways Underlying Ricin Susceptibility. Cell, 2013, 152, 909-922.	13.5	332

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37	Sororin Mediates Sister Chromatid Cohesion by Antagonizing Wapl. Cell, 2010, 143, 737-749.	13.5	325
38	Live-cell imaging RNAi screen identifies PP2A–B55α and importin-β1 as key mitotic exit regulators in human cells. Nature Cell Biology, 2010, 12, 886-893.	4.6	315
39	Growth and division of active droplets provides a model for protocells. Nature Physics, 2017, 13, 408-413.	6.5	304
40	SAS-4 Is a C. elegans Centriolar Protein that Controls Centrosome Size. Cell, 2003, 112, 575-587.	13.5	294
41	Amyloid-like Self-Assembly of a Cellular Compartment. Cell, 2016, 166, 637-650.	13.5	294
42	Polarization of PAR Proteins by Advective Triggering of a Pattern-Forming System. Science, 2011, 334, 1137-1141.	6.0	290
43	Polar Positioning of Phase-Separated Liquid Compartments in Cells Regulated by an mRNA Competition Mechanism. Cell, 2016, 166, 1572-1584.e16.	13.5	283
44	Partitioning of cancer therapeutics in nuclear condensates. Science, 2020, 368, 1386-1392.	6.0	281
45	Novel asymmetrically localizing components of human centrosomes identified by complementary proteomics methods. EMBO Journal, 2011, 30, 1520-1535.	3.5	278
46	Local Nucleation of Microtubule Bundles through Tubulin Concentration into a Condensed Tau Phase. Cell Reports, 2017, 20, 2304-2312.	2.9	278
47	Morphogenetic Properties of Microtubules and Mitotic Spindle Assembly. Cell, 1996, 84, 401-410.	13.5	277
48	Genome-scale RNAi profiling of cell division in human tissue culture cells. Nature Cell Biology, 2007, 9, 1401-1412.	4.6	270
49	Microtubule polymerases and depolymerases. Current Opinion in Cell Biology, 2007, 19, 31-35.	2.6	267
50	Predictive models of molecular machines involved in Caenorhabditis elegans early embryogenesis. Nature, 2005, 436, 861-865.	13.7	260
51	A Genome-Scale Resource for InÂVivo Tag-Based Protein Function Exploration in C.Âelegans. Cell, 2012, 150, 855-866.	13.5	253
52	Pericentriolar material structure and dynamics. Philosophical Transactions of the Royal Society B: Biological Sciences, 2014, 369, 20130459.	1.8	250
53	Aurora A phosphorylation of TACC3/maskin is required for centrosome-dependent microtubule assembly in mitosis. Journal of Cell Biology, 2005, 170, 1047-1055.	2.3	248
54	Protein condensates as aging Maxwell fluids. Science, 2020, 370, 1317-1323.	6.0	247

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55	Reentrant liquid condensate phase of proteins is stabilized by hydrophobic and non-ionic interactions. Nature Communications, 2021, 12, 1085.	5.8	245
56	Role of mitochondria in the pheromone- and amiodarone-induced programmed death of yeast. Journal of Cell Biology, 2005, 168, 257-269.	2.3	242
57	Are aberrant phase transitions a driver of cellular aging?. BioEssays, 2016, 38, 959-968.	1.2	234
58	A requirement for Rho and Cdc42 during cytokinesis in Xenopus embryos. Current Biology, 1997, 7, 12-23.	1.8	233
59	HAUS, the 8-Subunit Human Augmin Complex, Regulates Centrosome and Spindle Integrity. Current Biology, 2009, 19, 816-826.	1.8	231
60	BICD2, dynactin, and LIS1 cooperate in regulating dynein recruitment to cellular structures. Molecular Biology of the Cell, 2012, 23, 4226-4241.	0.9	231
61	The Caenorhabditis elegans Centrosomal Protein SPD-2 Is Required for both Pericentriolar Material Recruitment and Centriole Duplication. Current Biology, 2004, 14, 863-873.	1.8	225
62	Diverse transcription factor binding features revealed by genome-wide ChIP-seq in <i>C. elegans</i> Genome Research, 2011, 21, 245-254.	2.4	224
63	Stoichiometry of chromatin-associated protein complexes revealed by label-free quantitative mass spectrometry-based proteomics. Nucleic Acids Research, 2013, 41, e28-e28.	6.5	222
64	Beyond Oil and Waterâ€"Phase Transitions in Cells. Science, 2012, 337, 1047-1049.	6.0	217
65	Impaired DNA damage response signaling by FUS-NLS mutations leads to neurodegeneration and FUS aggregate formation. Nature Communications, 2018, 9, 335.	5.8	217
66	Spindle Positioning by Cortical Pulling Forces. Developmental Cell, 2005, 8, 461-465.	3.1	216
67	Identification of essential components of the S. cerevisiae kinetochore. Cell, 1993, 73, 761-774.	13.5	215
68	The kinetically dominant assembly pathway for centrosomal asters in Caenorhabditis elegans is \hat{I}^3 -tubulin dependent. Journal of Cell Biology, 2002, 157, 591-602.	2.3	213
69	ASYMMETRIC CELL DIVISION IN C. ELEGANS: Cortical Polarity and Spindle Positioning. Annual Review of Cell and Developmental Biology, 2004, 20, 427-453.	4.0	213
70	Molecular Requirements for Bi-directional Movement of Phagosomes Along Microtubules. Journal of Cell Biology, 1997, 137, 113-129.	2.3	212
71	Two different microtubule-based motor activities with opposite polarities in kinetochores. Nature, 1991, 351, 206-211.	13.7	208
72	Identification and Characterization of Factors Required for Microtubule Growth and Nucleation in the Early C. elegans Embryo. Developmental Cell, 2005, 9, 223-236.	3.1	208

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73	<scp>CPAP</scp> promotes timely cilium disassembly to maintain neural progenitor pool. EMBO Journal, 2016, 35, 803-819.	3.5	208
74	A cytokinesis furrow is positioned by two consecutive signals. Nature, 2005, 436, 731-734.	13.7	206
75	Coupling cell division and cell death to microtubule dynamics. Current Opinion in Cell Biology, 1997, 9, 807-814.	2.6	202
76	Reconstitution of Physiological Microtubule Dynamics Using Purified Components. Science, 2001, 294, 1340-1343.	6.0	202
77	Centrosomes direct cell polarity independently of microtubule assembly in C. elegans embryos. Nature, 2004, 431, 92-96.	13.7	198
78	Limiting Amounts of Centrosome Material Set Centrosome Size in C.Âelegans Embryos. Current Biology, 2011, 21, 1259-1267.	1.8	198
79	A Protein Domain-Based Interactome Network for C. elegans Early Embryogenesis. Cell, 2008, 134, 534-545.	13.5	196
80	A User's Guide for Phase Separation Assays with Purified Proteins. Journal of Molecular Biology, 2018, 430, 4806-4820.	2.0	195
81	A High-Resolution C.Âelegans Essential Gene Network Based on Phenotypic Profiling of a Complex Tissue. Cell, 2011, 145, 470-482.	13.5	193
82	Organelle Growth Control through Limiting Pools of Cytoplasmic Components. Current Biology, 2012, 22, R330-R339.	1.8	190
83	Centrosomes are autocatalytic droplets of pericentriolar material organized by centrioles. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E2636-45.	3.3	187
84	Phase Transitions Drive the Formation of Vesicular Stomatitis Virus Replication Compartments. MBio, 2018, 9, .	1.8	183
85	Different Material States of Pub1 Condensates Define Distinct Modes of Stress Adaptation and Recovery. Cell Reports, 2018, 23, 3327-3339.	2.9	183
86	Centrosome Size Sets Mitotic Spindle Length in Caenorhabditis elegans Embryos. Current Biology, 2010, 20, 353-358.	1.8	181
87	Building a spindle of the correct length in human cells requires the interaction between TPX2 and Aurora A. Journal of Cell Biology, 2008, 182, 289-300.	2.3	178
88	Spindle Oscillations during Asymmetric Cell Division Require a Threshold Number of Active Cortical Force Generators. Current Biology, 2006, 16, 2111-2122.	1.8	177
89	Site-Specific Cryo-focused Ion Beam Sample Preparation Guided by 3D Correlative Microscopy. Biophysical Journal, 2016, 110, 860-869.	0.2	172
90	CDK1 Inactivation Regulates Anaphase Spindle Dynamics and Cytokinesis In Vivo. Journal of Cell Biology, 1997, 138, 385-393.	2.3	171

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91	Regulated assembly of a supramolecular centrosome scaffold in vitro. Science, 2015, 348, 808-812.	6.0	170
92	The Mammalian SPD-2 Ortholog Cep192 RegulatesÂCentrosome Biogenesis. Current Biology, 2008, 18, 136-141.	1.8	169
93	Genome-Wide Identification of Binding Sites Defines Distinct Functions for Caenorhabditis elegans PHA-4/FOXA in Development and Environmental Response. PLoS Genetics, 2010, 6, e1000848.	1.5	165
94	The conserved protein DCN-1/Dcn1p is required for cullin neddylation in C. elegans and S. cerevisiae. Nature, 2005, 435, 1257-1261.	13.7	161
95	Synergy between XMAP215 and EB1 increases microtubule growth rates to physiological levels. Nature Cell Biology, 2013, 15, 688-693.	4.6	160
96	Organization and Function of Non-dynamic Biomolecular Condensates. Trends in Biochemical Sciences, 2018, 43, 81-94.	3.7	160
97	Functional Repurposing Revealed by Comparing S.Âpombe and S.Âcerevisiae Genetic Interactions. Cell, 2012, 149, 1339-1352.	13.5	154
98	Katanin Disrupts the Microtubule Lattice and Increases Polymer Number in C.Âelegans Meiosis. Current Biology, 2006, 16, 1944-1949.	1.8	152
99	Growth, fluctuation and switching at microtubule plus ends. Nature Reviews Molecular Cell Biology, 2009, 10, 569-574.	16.1	152
100	Quantification of surface tension and internal pressure generated by single mitotic cells. Scientific Reports, 2014, 4, 6213.	1.6	151
101	Aurora A activates D-TACC–Msps complexes exclusively at centrosomes to stabilize centrosomal microtubules. Journal of Cell Biology, 2005, 170, 1039-1046.	2.3	148
102	Beyond Stereospecificity: Liquids and Mesoscale Organization of Cytoplasm. Developmental Cell, 2011, 21, 14-16.	3.1	147
103	Suppression of Ostwald ripening in active emulsions. Physical Review E, 2015, 92, 012317.	0.8	146
104	Regulating the Yeast Kinetochore by Ubiquitin-Dependent Degradation and Skp1p-Mediated Phosphorylation. Cell, 1997, 91, 491-500.	13.5	144
105	Morphologically distinct microtubule ends in the mitotic centrosome of Caenorhabditis elegans. Journal of Cell Biology, 2003, 163, 451-456.	2.3	144
106	XMAP215 polymerase activity is built by combining multiple tubulin-binding TOG domains and a basic lattice-binding region. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 2741-2746.	3.3	143
107	Proliferating versus differentiating stem and cancer cells exhibit distinct midbody-release behaviour. Nature Communications, 2011, 2, 503.	5.8	139
108	EB1 Recognizes the Nucleotide State of Tubulin in the Microtubule Lattice. PLoS ONE, 2009, 4, e7585.	1.1	137

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109	Controlling compartmentalization by non-membrane-bound organelles. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170193.	1.8	132
110	Spatial Organization of the Cell Cytoplasm by Position-Dependent Phase Separation. Physical Review Letters, 2013, 111, 088101.	2.9	131
111	Cdk1-dependent mitotic enrichment of cortical myosinÂll promotes cell rounding against confinement. Nature Cell Biology, 2015, 17, 148-159.	4.6	131
112	Condensation of Ded1p Promotes a Translational Switch from Housekeeping to Stress Protein Production. Cell, 2020, 181, 818-831.e19.	13.5	130
113	CDC-42 and RHO-1 coordinate acto-myosin contractility and PAR protein localization during polarity establishment in C. elegansembryos. Development (Cambridge), 2006, 133, 3507-3516.	1.2	128
114	Protein Dynamics in Complex DNA Lesions. Molecular Cell, 2018, 69, 1046-1061.e5.	4.5	128
115	XMAP215: a key component of the dynamic microtubule cytoskeleton. Trends in Cell Biology, 2002, 12, 267-273.	3.6	126
116	One-step purification of assembly-competent tubulin from diverse eukaryotic sources. Molecular Biology of the Cell, 2012, 23, 4393-4401.	0.9	125
117	A focused ion beam milling and lift-out approach for site-specific preparation of frozen-hydrated lamellas from multicellular organisms. Journal of Structural Biology, 2015, 192, 262-269.	1.3	125
118	Salt-Dependent Rheology and Surface Tension of Protein Condensates Using Optical Traps. Physical Review Letters, 2018, 121, 258101.	2.9	125
119	Mitotic chromatin regulates phosphorylation of Stathmin/Op18. Nature, 1997, 389, 640-643.	13.7	120
120	Rheology of the Active Cell Cortex in Mitosis. Biophysical Journal, 2016, 111, 589-600.	0.2	119
121	APC15 mediates CDC20 autoubiquitylation by APC/CMCC and disassembly of the mitotic checkpoint complex. Nature Structural and Molecular Biology, 2012, 19, 1116-1123.	3.6	118
122	XMAP215 activity sets spindle length by controlling the total mass of spindle microtubules. Nature Cell Biology, 2013, 15, 1116-1122.	4.6	115
123	Kinetically distinct phases of tau on microtubules regulate kinesin motors and severing enzymes. Nature Cell Biology, 2019, 21, 1086-1092.	4.6	113
124	The Rho GTPase-activating proteins RGA-3 and RGA-4 are required to set the initial size of PAR domains in <i>Caenorhabditis elegans</i> one-cell embryos. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 14976-14981.	3.3	112
125	Crystal Structure of a TOG Domain: Conserved Features of XMAP215/Dis1-Family TOG Domains and Implications for Tubulin Binding. Structure, 2007, 15, 355-362.	1.6	112
126	PAR proteins diffuse freely across the anterior–posterior boundary in polarized <i>C. elegans</i> embryos. Journal of Cell Biology, 2011, 193, 583-594.	2.3	106

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127	An Essential Function of the C. elegans Ortholog of TPX2 Is to Localize Activated Aurora A Kinase to Mitotic Spindles. Developmental Cell, 2005, 9, 237-248.	3.1	105
128	Caenorhabditis elegans TAC-1 and ZYG-9 Form a Complex that Is Essential for Long Astral and Spindle Microtubules. Current Biology, 2003, 13, 1506-1511.	1.8	104
129	A genomic toolkit to investigate kinesin and myosin motor function in cells. Nature Cell Biology, 2013, 15, 325-334.	4.6	104
130	Structural Transitions at Microtubule Ends Correlate with Their Dynamic Properties in Xenopus Egg Extracts. Journal of Cell Biology, 2000, 149, 767-774.	2.3	103
131	Acto-myosin reorganization and PAR polarity in C. elegans. Development (Cambridge), 2007, 134, 1035-1043.	1.2	102
132	Automated tracing of microtubules in electron tomograms of plastic embedded samples of Caenorhabditis elegans embryos. Journal of Structural Biology, 2012, 178, 129-138.	1.3	101
133	Stress Generation and Filament Turnover during Actin Ring Constriction. PLoS ONE, 2007, 2, e696.	1.1	99
134	zyg-8, a Gene Required for Spindle Positioning in C. elegans, Encodes a Doublecortin-Related Kinase that Promotes Microtubule Assembly. Developmental Cell, 2001, 1, 363-375.	3.1	98
135	Membrane Invaginations Reveal Cortical Sites that Pull on Mitotic Spindles in One-Cell C. elegans Embryos. PLoS ONE, 2010, 5, e12301.	1.1	96
136	Isogenic FUS-eGFP iPSC Reporter Lines Enable Quantification of FUS Stress Granule Pathology that Is Rescued by Drugs Inducing Autophagy. Stem Cell Reports, 2018, 10, 375-389.	2.3	95
137	FUS pathology in ALS is linked to alterations in multiple ALS-associated proteins and rescued by drugs stimulating autophagy. Acta Neuropathologica, 2019, 138, 67-84.	3.9	94
138	LGL Can Partition the Cortex of One-Cell Caenorhabditis elegans Embryos into Two Domains. Current Biology, 2010, 20, 1296-1303.	1.8	92
139	Comparative profiling identifies C13orf3 as a component of the Ska complex required for mammalian cell division. EMBO Journal, 2009, 28, 1453-1465.	3.5	89
140	RNA interference rescue by bacterial artificial chromosome transgenesis in mammalian tissue culture cells. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 2396-2401.	3.3	88
141	The C. elegans RSA Complex Localizes Protein Phosphatase 2A to Centrosomes and Regulates Mitotic Spindle Assembly. Cell, 2007, 128, 115-127.	13.5	87
142	Systematic Phosphorylation Analysis of Human Mitotic Protein Complexes. Science Signaling, 2011, 4, rs12.	1.6	87
143	GTP Binding Induces Filament Assembly of a Recombinant Septin. Current Biology, 2002, 12, 1858-1863.	1.8	86
144	Principles of PAR polarity in Caenorhabditis elegans embryos. Nature Reviews Molecular Cell Biology, 2013, 14, 315-322.	16.1	85

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145	Temperature Dependence of Cell Division Timing Accounts for a Shift in the Thermal Limits of C.Âelegans and C.Âbriggsae. Cell Reports, 2015, 10, 647-653.	2.9	85
146	Mitotic cells contract actomyosin cortex and generate pressure to round against or escape epithelial confinement. Nature Communications, 2015, 6, 8872.	5.8	79
147	Chapter 7 Preparation of Marked Microtubules for the Assay of the Polarity of Microtubule-Based Motors by Fluorescence Microscopy. Methods in Cell Biology, 1993, 39, 105-113.	0.5	74
148	LET-99, GOA-1/GPA-16, and GPR-1/2 Are Required for Aster-Positioned Cytokinesis. Current Biology, 2007, 17, 185-191.	1.8	74
149	Sequence-dependent surface condensation of a pioneer transcription factor on DNA. Nature Physics, 2022, 18, 271-276.	6.5	73
150	Conserved TCP domain of Sas-4/CPAP is essential for pericentriolar material tethering during centrosome biogenesis. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E354-63.	3.3	70
151	Cell cycle progression requires the CDC-48 ^{UFDâ^'1/NPLâ^'4} complex for efficient DNA replication. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 12879-12884.	3.3	69
152	Sds22 and Repo-Man stabilize chromosome segregation by counteracting Aurora B on anaphase kinetochores. Journal of Cell Biology, 2012, 198, 173-183.	2.3	69
153	Purification of Tubulin from Porcine Brain. Methods in Molecular Biology, 2011, 777, 15-28.	0.4	68
154	Efficient chaperone-mediated tubulin biogenesis is essential for cell division and cell migration in C. elegans. Developmental Biology, 2008, 313, 320-334.	0.9	66
155	Molecular basis for CPAP-tubulin interaction in controlling centriolar and ciliary length. Nature Communications, 2016, 7, 11874.	5.8	66
156	The mbkâ€2 kinase is required for inactivation of MEIâ€1/katanin in the oneâ€cell Caenorhabditis elegans embryo. EMBO Reports, 2003, 4, 1175-1181.	2.0	65
157	Rab5 and Alsin regulate stress-activated cytoprotective signaling on mitochondria. ELife, 2018, 7, .	2.8	65
158	Local thermodynamics govern formation and dissolution of <i>Caenorhabditis </i> elegans P granule condensates. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	64
159	FRAP Analysis of Membrane-Associated Proteins: Lateral Diffusion and Membrane-Cytoplasmic Exchange. Biophysical Journal, 2010, 99, 2443-2452.	0.2	63
160	Cyclin E–Cdk2 temporally regulates centrosome assembly and establishment of polarity in Caenorhabditis elegans embryos. Nature Cell Biology, 2006, 8, 1441-1447.	4.6	60
161	Drops and fibers — how biomolecular condensates and cytoskeletal filaments influence each other. Emerging Topics in Life Sciences, 2020, 4, 247-261.	1.1	54
162	Polo-like kinase phosphorylation determines <i>Caenorhabditis elegans</i> centrosome size and density by biasing SPD-5 toward an assembly-competent conformation. Biology Open, 2016, 5, 1431-1440.	0.6	53

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163	Characterization of Protein Dynamics in Asymmetric Cell Division by Scanning Fluorescence Correlation Spectroscopy. Biophysical Journal, 2008, 95, 5476-5486.	0.2	52
164	High-efficiency counterselection recombineering for site-directed mutagenesis in bacterial artificial chromosomes. Nature Methods, 2012, 9, 103-109.	9.0	52
165	GTSE1 Is a Microtubule Plus-End Tracking Protein That Regulates EB1-Dependent Cell Migration. PLoS ONE, 2012, 7, e51259.	1.1	52
166	Genome-scale single-cell mechanical phenotyping reveals disease-related genes involved in mitotic rounding. Nature Communications, 2017, 8, 1266.	5.8	52
167	Functional Interaction between Phosducin-like Protein 2 and Cytosolic Chaperonin Is Essential for Cytoskeletal Protein Function and Cell Cycle Progression. Molecular Biology of the Cell, 2007, 18, 2336-2345.	0.9	50
168	The replicative helicase MCM recruits cohesin acetyltransferase ESCO2 to mediate centromeric sister chromatid cohesion. EMBO Journal, 2018, 37, .	3.5	50
169	Products of the Parkinson's disease-related glyoxalase DJ-1, D-lactate and glycolate, support mitochondrial membrane potential and neuronal survival. Biology Open, 2014, 3, 777-784.	0.6	49
170	Cortical domains and the mechanisms of asymmetric cell division. Trends in Cell Biology, 1996, 6, 382-387.	3.6	46
171	Cortical domain correction repositions the polarity boundary to match the cytokinesis furrow in C. elegans embryos. Development (Cambridge), 2010, 137, 1743-1753.	1.2	46
172	Tracking mechanics and volume of globular cells with atomic force microscopy using a constant-height clamp. Nature Protocols, 2012, 7, 143-154.	5.5	45
173	HspB8 prevents aberrant phase transitions of FUS by chaperoning its folded RNA-binding domain. ELife, 2021, 10, .	2.8	42
174	Quantitative comparison of a human cancer cell surface proteome between interphase and mitosis. EMBO Journal, 2015, 34, 251-265.	3.5	41
175	Emergent Properties of the Metaphase Spindle. Cold Spring Harbor Perspectives in Biology, 2015, 7, a015784.	2.3	40
176	Phosphofructokinase relocalizes into subcellular compartments with liquid-like properties inÂvivo. Biophysical Journal, 2021, 120, 1170-1186.	0.2	39
177	Timing and mechanism of the initial cue establishing handed left–right asymmetry in <i>Caenorhabditis elegans</i> embryos. Genesis, 2014, 52, 572-580.	0.8	38
178	Correct spindle elongation at the metaphase/anaphase transition is an APC-dependent event in budding yeast. Journal of Cell Biology, 2001, 155, 711-718.	2.3	34
179	Coiled-Coil Proteins Facilitated the Functional Expansion of the Centrosome. PLoS Computational Biology, 2014, 10, e1003657.	1.5	32
180	Phosphatase PP2A and microtubule-mediated pulling forces disassemble centrosomes during mitotic exit. Biology Open, 2018, 7 , .	0.6	32

#	Article	IF	CITATIONS
181	The <i>Caenorhabditiselegans</i> pericentriolar material components SPD-2 and SPD-5 are monomeric in the cytoplasm before incorporation into the PCM matrix. Molecular Biology of the Cell, 2014, 25, 2984-2992.	0.9	31
182	Analysis of the distribution of the kinetochore protein Ndc10p in Saccharomyces cerevisiae using 3-D modeling of mitotic spindles. Chromosoma, 2003, 111, 417-428.	1.0	29
183	The Segmentation of Microtubules in Electron Tomograms Using Amira. Methods in Molecular Biology, 2014, 1136, 261-278.	0.4	29
184	PLEKHA7 Recruits PDZD11 to Adherens Junctions to Stabilize Nectins. Journal of Biological Chemistry, 2016, 291, 11016-11029.	1.6	28
185	Priority of discovery in the life sciences. ELife, 2016, 5, .	2.8	28
186	Force probing cell shape changes to molecular resolution. Trends in Biochemical Sciences, 2011, 36, 444-450.	3.7	27
187	The Mitotic Spindle in the One-Cell C . elegans Embryo Is Positioned with High Precision and Stability. Biophysical Journal, 2016, 111, 1773-1784.	0.2	27
188	Soluble tubulin is significantly enriched at mitotic centrosomes. Journal of Cell Biology, 2019, 218, 3977-3985.	2.3	26
189	Automated tracking and analysis of centrosomes in early <i>Caenorhabditis elegans</i> embryos. Bioinformatics, 2010, 26, i13-i20.	1.8	25
190	Directed Growth of Biomimetic Microcompartments. Advanced Biology, 2019, 3, e1800314.	3.0	25
191	Cell Polarity: The importance of being polar. Current Biology, 1995, 5, 1102-1105.	1.8	24
192	Positioning of Particles in Active Droplets. Physical Review Letters, 2018, 121, 158102.	2.9	24
193	Inhibition of <scp>CPAP</scp> â€"tubulin interaction prevents proliferation of centrosomeâ€amplified cancer cells. EMBO Journal, 2019, 38, .	3.5	24
194	RNA gets in phase. Journal of Cell Biology, 2017, 216, 2235-2237.	2.3	23
195	A ubiquitin C-terminal hydrolase is required to maintain osmotic balance and execute actin-dependent processes in the early <i>C. elegans </i>	1.2	23
196	Stem cells: the new "model organism― Molecular Biology of the Cell, 2017, 28, 1409-1411.	0.9	22
197	Quantitative theory for the diffusive dynamics of liquid condensates. ELife, 2021, 10, .	2.8	22
198	Global and local control of microtubule destabilization promoted by a catastrophe kinesin MCAK/XKCM1. Journal of Muscle Research and Cell Motility, 2006, 27, 107-114.	0.9	20

#	Article	IF	Citations
199	A liquid reservoir for silent chromatin. Nature, 2017, 547, 168-169.	13.7	20
200	The First Cell Cycle of the Caenorhabditis elegans Embryo: Spatial and Temporal Control of an Asymmetric Cell Division. Results and Problems in Cell Differentiation, 2011, 53, 109-133.	0.2	19
201	Method. Methods in Cell Biology, 2015, 129, 369-382.	0.5	18
202	A comparison of the ability of XMAP215 and tau to inhibit the microtubule destabilizing activity of XKCM1. Philosophical Transactions of the Royal Society B: Biological Sciences, 2005, 360, 591-594.	1.8	17
203	Sestrin 2 Protein Regulates Platelet-derived Growth Factor Receptor \hat{l}^2 (Pdgfr \hat{l}^2) Expression by Modulating Proteasomal and Nrf2 Transcription Factor Functions. Journal of Biological Chemistry, 2015, 290, 9738-9752.	1.6	17
204	Whither systems biology. Philosophical Transactions of the Royal Society B: Biological Sciences, 2011, 366, 3635-3637.	1.8	16
205	In vitro Reconstitution of a Membrane Switch Mechanism for the Polarity Protein LGL. Journal of Molecular Biology, 2016, 428, 4828-4842.	2.0	15
206	Feedback control of PLK1 by Apolo1 ensures accurate chromosome segregation. Cell Reports, 2021, 36, 109343.	2.9	15
207	Centrosomes: Sic transit gloria centri. Current Biology, 2000, 10, R276-R278.	1.8	14
208	Characterization of RNA content in individual phase-separated coacervate microdroplets. Nature Communications, 2022, 13, 2626.	5.8	14
209	TransgeneOmics – A transgenic platform for protein localization based function exploration. Methods, 2016, 96, 69-74.	1.9	13
210	Two-photon fluorescence imaging and correlation analysis applied to protein dynamics in C. elegans embryo. , 2008, , .		9
211	Cell Fate Determination: When is a determinant a determinant?. Current Biology, 1994, 4, 420-422.	1.8	6
212	A locus in $\langle i \rangle$ Pristionchus pacificus $\langle i \rangle$ that is responsible for the ability to give rise to fertile offspring at higher temperatures. Biology Open, 2016, 5, 1111-1117.	0.6	6
213	Boveri revisited. EMBO Journal, 2005, 24, 1104-1110.	3.5	3
214	C11ORF24 Is a Novel Type I Membrane Protein That Cycles between the Golgi Apparatus and the Plasma Membrane in Rab6-Positive Vesicles. PLoS ONE, 2013, 8, e82223.	1.1	3
215	Funding Innovative Science. Science, 2013, 339, 119-119.	6.0	2
216	ESI mutagenesis: a one-step method for introducing mutations into bacterial artificial chromosomes. Life Science Alliance, 2021, 4, e202000836.	1.3	2

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217	High-Voltage Electron Tomography of the Centrosome in Caenorhabditis elegans. Microscopy and Microanalysis, 2002, 8, 880-881.	0.2	1
218	Samurai Sword Sets Spindle Size. Cell, 2011, 147, 1224-1225.	13.5	1
219	Atomic Force Microscopy to Study Mechanics of Living Mitotic Mammalian Cells. Japanese Journal of Applied Physics, 2011, 50, 08LA01.	0.8	1
220	Encouraging innovation. Molecular Biology of the Cell, 2014, 25, 427-428.	0.9	1
221	ASCB Keith Porter Lecture. Molecular Biology of the Cell, 2020, 31, 2864-2867.	0.9	1
222	High-Voltage Electron Tomography of the Early C. elegans Mitotic Spindle. Microscopy and Microanalysis, 2003, 9, 384-385.	0.2	0
223	The C. elegans Centrosome during Early Embryonic Development. , 2005, , 225-250.		0
224	The Caenorhabditis elegans Centrosomal Protein SPD-2 Is Required for both Pericentriolar Material Recruitment and Centriole Duplication. Current Biology, 2006, 16, 1255.	1.8	0
225	3K1334 A single-cell RNAi screen for regulators of mitotic cell mechanics identifies diseases-associated genes(Cell biology 4,The 49th Annual Meeting of the Biophysical Society of Japan). Seibutsu Butsuri, 2011, 51, S146.	0.0	0