Jonathon Howard

List of Publications by Year
in descending order

192	23,224	6606 79	8852 145
papers	citations	h-index	g-index

223	223	223	14373
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Flexural rigidity of microtubules and actin filaments measured from thermal fluctuations in shape.. Journal of Cell Biology, 1993, 120, 923-934.	2.3	1,632
2	Movement of microtubules by single kinesin molecules. Nature, 1989, 342, 154-158.	13.7	897
3	Dynamics and mechanics of the microtubule plus end. Nature, 2003, 422, 753-758.	13.7	666
4	A standardized kinesin nomenclature. Journal of Cell Biology, 2004, 167, 19-22.	2.3	662
5	Compliance of the hair bundle associated with gating of mechanoelectrical transduction channels in the Bullfrog's saccular hair cell. Neuron, 1988, 1, 189-199.	3.8	590
6	A Self-Organized Vortex Array of Hydrodynamically Entrained Sperm Cells. Science, 2005, 309, 300-303.	6.0	492
7	Molecular motors: structural adaptations to cellular functions. Nature, 1997, 389, 561-567.	13.7	480
8	XMAP215 Is a Processive Microtubule Polymerase. Cell, 2008, 132, 79-88.	13.5	479
9	Yeast kinesin-8 depolymerizes microtubules in a length-dependent manner. Nature Cell Biology, 2006, 8, 957-962.	4.6	426
10	The depolymerizing kinesin MCAK uses lattice diffusion to rapidly target microtubule ends. Nature, 2006, 441, 115-119.	13.7	408
11	Mechanical relaxation of the hair bundle mediates adaptation in mechanoelectrical transduction by the bullfrog's saccular hair cell.. Proceedings of the National Academy of Sciences of the United States of America, 1987, 84, 3064-3068.	3.3	352
12	The Distribution of Active Force Generators Controls Mitotic Spindle Position. Science, 2003, 301, 518-521.	6.0	351
13	Kinesin follows the microtubule's protofilament axis.. Journal of Cell Biology, 1993, 121, 1083-1093.	2.3	343
14	The force exerted by a single kinesin molecule against a viscous load. Biophysical Journal, 1994, 67, 766-781.	0.2	343
15	The Kinesin-Related Protein MCAK Is a Microtubule Depolymerase that Forms an ATP-Hydrolyzing Complex at Microtubule Ends. Molecular Cell, 2003, 11, 445-457.	4.5	332
16	Light-Controlled Molecular Shuttles Made from Motor Proteins Carrying Cargo on Engineered Surfaces. Nano Letters, 2001, 1, 235-239.	4.5	313
17	Kinesin Takes One 8-nm Step for Each ATP That It Hydrolyzes. Journal of Biological Chemistry, 1999, 274, 3667-3671.	1.6	311
18	Rigidity of microtubules is increased by stabilizing agents.. Journal of Cell Biology, 1995, 130, 909-917.	2.3	306

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19	Calibration of optical tweezers with positional detection in the back focal plane. Review of Scientific Instruments, 2006, 77, 103101.	0.6	294
20	How molecular motors shape the flagellar beat. HFSP Journal, 2007, 1, 192-208.	2.5	278
21	Kinesinâ€™s tail domain is an inhibitory regulator of the motor domain. Nature Cell Biology, 1999, 1, 288-292.	4.6	269
22	Microtubule polymerases and depolymerases. Current Opinion in Cell Biology, 2007, 19, 31-35.	2.6	267
23	Kinesin-8 Motors Act Cooperatively to Mediate Length-Dependent Microtubule Depolymerization. Cell, 2009, 138, 1174-1183.	13.5	263
24	Mechanoelectrical Transduction by Hair Cells. Annual Review of Biophysics and Biophysical Chemistry, 1988, 17, 99-124.	12.2	262
25	Processivity of the Motor Protein Kinesin Requires Two Heads. Journal of Cell Biology, 1998, 140, 1395-1405.	2.3	261
26	Broken detailed balance at mesoscopic scales in active biological systems. Science, 2016, 352, 604-607.	6.0	259
27	Microtubule Dynamics Reconstituted In Vitro and Imaged by Single-Molecule Fluorescence Microscopy. Methods in Cell Biology, 2010, 95, 221-245.	0.5	239
28	High-precision tracking of sperm swimming fine structure provides strong test of resistive force theory. Journal of Experimental Biology, 2010, 213, 1226-1234.	0.8	236
29	Turing's next steps: the mechanochemical basis of morphogenesis. Nature Reviews Molecular Cell Biology, 2011, 12, 392-398.	16.1	236
30	Kinesin's processivity results from mechanical and chemical coordination between the ATP hydrolysis cycles of the two motor domains. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 13147-13152.	3.3	223
31	The Movement of Kinesin Along Microtubules. Annual Review of Physiology, 1996, 58, 703-729.	5.6	222
32	Surface Forces and Drag Coefficients of Microspheres near a Plane Surface Measured with Optical Tweezers. Langmuir, 2007, 23, 3654-3665.	1.6	220
33	Assembly of collagen into microribbons: effects of pH and electrolytes. Journal of Structural Biology, 2004, 148, 268-278.	1.3	208
34	The force generated by a single kinesin molecule against an elastic load.. Proceedings of the National Academy of Sciences of the United States of America, 1995, 92, 574-578.	3.3	207
35	Differentiation of Cytoplasmic and Meiotic Spindle Assembly MCAK Functions by Aurora B-dependent Phosphorylation. Molecular Biology of the Cell, 2004, 15, 2895-2906.	0.9	202
36	Rapid Microtubule Self-Assembly Kinetics. Cell, 2011, 146, 582-592.	13.5	201

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37	Depolymerizing Kinesins Kip3 and MCAK Shape Cellular Microtubule Architecture by Differential Control of Catastrophe. Cell, 2011, 147, 1092-1103.	13.5	201
38	Drosophila Auditory Organ Genes and Genetic Hearing Defects. Cell, 2012, 150, 1042-1054.	13.5	197
39	Protein Friction Limits Diffusive and Directed Movements of Kinesin Motors on Microtubules. Science, 2009, 325, 870-873.	6.0	196
40	Splicing of Nascent RNA Coincides with Intron Exit from RNA Polymerase II. Cell, 2016, 165, 372-381.	13.5	196
41	Molecular crowding creates traffic jams of kinesin motors on microtubules. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 6100-6105.	3.3	186
42	Hypothesis: A helix of ankyrin repeats of the NOMPC-TRP ion channel is the gating spring of mechanoreceptors. Current Biology, 2004, 14, R224-R226.	1.8	185
43	Straight GDP-Tubulin Protofilaments Form in the Presence of Taxol. Current Biology, 2007, 17, 1765-1770.	1.8	179
44	Spindle Oscillations during Asymmetric Cell Division Require a Threshold Number of Active Cortical Force Generators. Current Biology, 2006, 16, 2111-2122.	1.8	177
45	Hair Cells: Transduction, Tuning, and Transmission in the Inner Ear. Annual Review of Cell Biology, 1988, 4, 63-92.	26.0	176
46	Stretching and Transporting DNA Molecules Using Motor Proteins. Nano Letters, 2003, 3, 1251-1254.	4.5	161
47	Synergy between XMAP215 and EB1 increases microtubule growth rates to physiological levels. Nature Cell Biology, 2013, 15, 688-693.	4.6	160
48	Molecular profiling reveals synaptic release machinery in Merkel cells. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 14503-14508.	3.3	154
49	Growth, fluctuation and switching at microtubule plus ends. Nature Reviews Molecular Cell Biology, 2009, 10, 569-574.	16.1	152
50	Microtubule catastrophe and rescue. Current Opinion in Cell Biology, 2013, 25, 14-22.	2.6	151
51	Microtubule dynamic instability: A new model with coupled GTP hydrolysis and multistep catastrophe. BioEssays, 2013, 35, 452-461.	1.2	148
52	Directional loading of the kinesin motor molecule as it buckles a microtubule. Biophysical Journal, 1996, 70, 418-429.	0.2	147
53	Slow local movements of collagen fibers by fibroblasts drive the rapid global self-organization of collagen gels. Journal of Cell Biology, 2002, 157, 1083-1092.	2.3	146
54	Molecular shuttles: directed motion of microtubules along nanoscale kinesin tracks. Nanotechnology, 1999, 10, 232-236.	1.3	145

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55	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
56	A force-generating machinery maintains the spindle at the cell center during mitosis. Science, 2016, 352, 1124-1127.	6.0	138
57	EB1 Recognizes the Nucleotide State of Tubulin in the Microtubule Lattice. PLoS ONE, 2009, 4, e7585.	1.1	137
58	Dynamic curvature regulation accounts for the symmetric and asymmetric beats of Chlamydomonas flagella. ELife, 2016, 5, .	2.8	136
59	Synaptic limitations to contrast coding in the retina of the blowfly Calliphora. Proceedings of the Royal Society of London Series B, Containing Papers of A Biological Character, 1987, 231, 437-467.	1.8	135
60	Stiffness of sensory hair bundles in the sacculus of the frog. Hearing Research, 1986, 23, 93-104.	0.9	133
61	Detection of fractional steps in cargo movement by the collective operation of kinesin-1 motors. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 10847-10852.	3.3	132
62	Conformational changes during kinesin motility. Current Opinion in Cell Biology, 2001, 13, 19-28.	2.6	126
63	One-step purification of assembly-competent tubulin from diverse eukaryotic sources. Molecular Biology of the Cell, 2012, 23, 4393-4401.	0.9	125
64	Measurement of the membrane curvature preference of phospholipids reveals only weak coupling between lipid shape and leaflet curvature. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 22245-22250.	3.3	123
65	The distance that kinesin-1 holds its cargo from the microtubule surface measured by fluorescence interference contrast microscopy. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 15812-15817.	3.3	121
66	Molecular-scale Topographic Cues Induce the Orientation and Directional Movement of Fibroblasts on Two-dimensional Collagen Surfaces. Journal of Molecular Biology, 2005, 349, 380-386.	2.0	118
67	Analysis of Microtubule Guidance in Open Microfabricated Channels Coated with the Motor Protein Kinesinâ€. Langmuir, 2003, 19, 1738-1744.	1.6	117
68	Drawing an elephant with four complex parameters. American Journal of Physics, 2010, 78, 648-649.	0.3	116
69	XMAP215 activity sets spindle length by controlling the total mass of spindle microtubules. Nature Cell Biology, 2013, 15, 1116-1122.	4.6	115
70	Cell-body rocking is a dominant mechanism for flagellar synchronization in a swimming alga. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 18058-18063.	3.3	114
71	The dynamics of phototransduction in insects. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 1984, 154, 707-718.	0.7	108
72	Chapter 10 Assay of Microtubule Movement Driven by Single Kinesin Molecules. Methods in Cell Biology, 1993, 39, 137-147.	0.5	104

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73	Inhibition of kinesin motility by ADP and phosphate supports a hand-over-hand mechanism. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 1183-1188.	3.3	103
74	The intracellular pupil mechanism and photoreceptor signal: noise ratios in the fly Lucilia cuprina. Proceedings of the Royal Society of London Series B, Containing Papers of A Biological Character, 1987, 231, 415-435.	1.8	101
75	Surface Imaging by Self-Propelled Nanoscale Probes. Nano Letters, 2002, 2, 113-116.	4.5	100
76	Kinesin swivels to permit microtubule movement in any direction.. Proceedings of the National Academy of Sciences of the United States of America, 1993, 90, 11653-11657.	3.3	99
77	Shapes of Red Blood Cells: Comparison of 3D Confocal Images with the Bilayer-Couple Model. Cellular and Molecular Bioengineering, 2008, 1, 173-181.	1.0	98
78	Membrane Invaginations Reveal Cortical Sites that Pull on Mitotic Spindles in One-Cell C. elegans Embryos. PLoS ONE, 2010, 5, e12301.	1.1	96
79	Mechanism of microtubule lumen entry for the Î±-tubulin acetyltransferase enzyme Î±TAT1. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E7176-E7184.	3.3	95
80	Spastin is a dual-function enzyme that severs microtubules and promotes their regrowth to increase the number and mass of microtubules. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 5533-5541.	3.3	93
81	A Piconewton Forcemeter Assembled from Microtubules and Kinesins. Nano Letters, 2002, 2, 1113-1115.	4.5	89
82	Optical trapping of coated microspheres. Optics Express, 2008, 16, 13831.	1.7	88
83	Mechanical Signaling in Networks of Motor and Cytoskeletal Proteins. Annual Review of Biophysics, 2009, 38, 217-234.	4.5	85
84	Regulation of Microtubule Growth and Catastrophe: Unifying Theory and Experiment. Trends in Cell Biology, 2015, 25, 769-779.	3.6	85
85	A NOMPC-Dependent Membrane-Microtubule Connector Is a Candidate for the Gating Spring in Fly Mechanoreceptors. Current Biology, 2013, 23, 755-763.	1.8	82
86	Reconstitution and Characterization of Budding Yeast Î³-Tubulin Complex. Molecular Biology of the Cell, 2002, 13, 1144-1157.	0.9	80
87	Elastic and damping forces generated by confined arrays of dynamic microtubules. Physical Biology, 2006, 3, 54-66.	0.8	78
88	NOMPC, a member of the TRP channel family, localizes to the tubular body and distal cilium of <i>Drosophila</i> campaniform and chordotonal receptor cells. Cytoskeleton, 2011, 68, 1-7.	1.0	77
89	Optics of the butterfly eye. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 1988, 162, 341-366.	0.7	74
90	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

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91	A Non-Motor Microtubule Binding Site Is Essential for the High Processivity and Mitotic Function of Kinesin-8 Kif18A. PLoS ONE, 2011, 6, e27471.	1.1	72
92	Response of an insect photoreceptor: a simple log-normal model. Nature, 1981, 290, 415-416.	13.7	71
93	Labelâ€free highâ€speed wideâ€field imaging of single microtubules using interference reflection microscopy. Journal of Microscopy, 2018, 272, 60-66.	0.8	69
94	Purification of Tubulin from Porcine Brain. Methods in Molecular Biology, 2011, 777, 15-28.	0.4	68
95	The kinesin-13 MCAK has an unconventional ATPase cycle adapted for microtubule depolymerization. EMBO Journal, 2011, 30, 3928-3939.	3.5	68
96	The Motility of Axonemal Dynein Is Regulated by the Tubulin Code. Biophysical Journal, 2014, 107, 2872-2880.	0.2	67
97	Microtubules: 50 years on from the discovery of tubulin. Nature Reviews Molecular Cell Biology, 2016, 17, 322-328.	16.1	67
98	Parallel Manipulation of Bifunctional DNA Molecules on Structured Surfaces Using Kinesin-Driven Microtubules. Small, 2006, 2, 1090-1098.	5.2	65
99	Protein power strokes. Current Biology, 2006, 16, R517-R519.	1.8	59
100	The Highly Processive Kinesin-8, Kip3, Switches Microtubule Protofilaments with a Bias toward the Left. Biophysical Journal, 2012, 103, L4-L6.	0.2	59
101	Kinesin-8 Is a Low-Force Motor Protein with a Weakly Bound Slip State. Biophysical Journal, 2013, 104, 2456-2464.	0.2	57
102	Force Generated by Two Kinesin Motors Depends on the Load Direction and Intermolecular Coupling. Physical Review Letters, 2019, 122, 188101.	2.9	55
103	Structures of outer-arm dynein array on microtubule doublet reveal a motor coordination mechanism. Nature Structural and Molecular Biology, 2021, 28, 799-810.	3.6	55
104	Heat Oscillations Driven by the Embryonic Cell Cycle Reveal the Energetic Costs of Signaling. Developmental Cell, 2019, 48, 646-658.e6.	3.1	54
105	A doublecortin containing microtubule-associated protein is implicated in mechanotransduction in Drosophila sensory cilia. Nature Communications, 2010, 1, 11.	5.8	52
106	Physical bioenergetics: Energy fluxes, budgets, and constraints in cells. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	52
107	Functional and Spatial Regulation of Mitotic Centromere- Associated Kinesin by Cyclin-Dependent Kinase 1. Molecular and Cellular Biology, 2010, 30, 2594-2607.	1.1	51
108	Stu2, the Budding Yeast XMAP215/Dis1 Homolog, Promotes Assembly of Yeast Microtubules by Increasing Growth Rate and Decreasing Catastrophe Frequency. Journal of Biological Chemistry, 2014, 289, 28087-28093.	1.6	51

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109	Cutting, Amplifying, and Aligning Microtubules with Severing Enzymes. Trends in Cell Biology, 2021, 31, 50-61.	3.6	51
110	LED illumination for videoâ€enhanced DIC imaging of single microtubules. Journal of Microscopy, 2007, 226, 1-5.	0.8	50
111	Independent Control of the Static and Dynamic Components of the Chlamydomonas Flagellar Beat. Current Biology, 2016, 26, 1098-1103.	1.8	50
112	The dynamic and structural properties of axonemal tubulins support the high length stability of cilia. Nature Communications, 2019, 10, 1838.	5.8	50
113	Islands Containing Slowly Hydrolyzable GTP Analogs Promote Microtubule Rescues. PLoS ONE, 2012, 7, e30103.	1.1	48
114	Studying Kinesin Motors by Optical 3D-Nanometry in Gliding Motility Assays. Methods in Cell Biology, 2010, 95, 247-271.	0.5	47
115	The cell end marker TeaA and the microtubule polymerase AlpA contribute to microtubule guidance at the hyphal tip cortex of <i>Aspergillus nidulans</i> for polarity maintenance. Journal of Cell Science, 2013, 126, 5400-11.	1.2	46
116	The growth speed of microtubules with XMAP215-coated beads coupled to their ends is increased by tensile force. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 14670-14675.	3.3	44
117	Kinesin Kip2 enhances microtubule growth in vitro through length-dependent feedback on polymerization and catastrophe. ELife, 2015, 4, .	2.8	44
118	Creating nanoscopic collagen matrices using atomic force microscopy. Microscopy Research and Technique, 2004, 64, 435-440.	1.2	43
119	Afocal apposition optics in butterfly eyes. Nature, 1984, 312, 561-563.	13.7	41
120	Minimum-energy vesicle and cell shapes calculated using spherical harmonics parameterization. Soft Matter, 2011, 7, 2138.	1.2	40
121	Physical Limits on the Precision of Mitotic Spindle Positioning by Microtubule Pushing forces. BioEssays, 2017, 39, 1700122.	1.2	40
122	Transduction as a limitation on compound eye function and design. Proceedings of the Royal Society of London Series B, Containing Papers of A Biological Character, 1983, 217, 287-307.	1.8	38
123	Organelle transport and sorting in axons. Current Opinion in Neurobiology, 1994, 4, 662-667.	2.0	33
124	Automatic optimal filament segmentation with sub-pixel accuracy using generalized linear models and B-spline level-sets. Medical Image Analysis, 2016, 32, 157-172.	7.0	33
125	Structural Biology: Piezo Senses Tension through Curvature. Current Biology, 2018, 28, R357-R359.	1.8	31
126	Curvature regulation of the ciliary beat through axonemal twist. Physical Review E, 2016, 94, 042426.	0.8	30

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127	Temporal resolving power of the photoreceptors ofLocusta migratoria. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 1981, 144, 61-66.	0.7	28
128	Reconstitution of Flagellar Sliding. Methods in Enzymology, 2013, 524, 343-369.	0.4	27
129	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
130	Coupling of kinesin ATP turnover to translocation and microtubule regulation: one engine, many machines. Journal of Muscle Research and Cell Motility, 2012, 33, 377-383.	0.9	24
131	Quantitative cell biology: the essential role of theory. Molecular Biology of the Cell, 2014, 25, 3438-3440.	0.9	24
132	Motor Regulation Results in Distal Forces that Bend Partially Disintegrated Chlamydomonas Axonemes into Circular Arcs. Biophysical Journal, 2014, 106, 2434-2442.	0.2	23
133	Spherical harmonics-based parametric deconvolution of 3D surface images using bending energy minimization. Medical Image Analysis, 2008, 12, 217-227.	7.0	22
134	Secondary Structure and Compliance of a Predicted Flexible Domain in Kinesin-1 Necessary for Cooperation of Motors. Biophysical Journal, 2008, 95, 5216-5227.	0.2	22
135	The narrowing of dendrite branches across nodes follows a well-defined scaling law. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	22
136	The Microtubule-Based Cytoskeleton Is a Component of a Mechanical Signaling Pathway in Fly Campaniform Receptors. Biophysical Journal, 2014, 107, 2767-2774.	0.2	21
137	Displacement-Weighted Velocity Analysis of Gliding Assays Reveals that Chlamydomonas Axonemal Dynein Preferentially Moves Conspecific Microtubules. Biophysical Journal, 2013, 104, 1989-1998.	0.2	20
138	Variations in the voltage response to single quanta of light in the photoreceptors of Locusta Migratoria. Biophysics of Structure and Mechanism, 1983, 9, 341-348.	1.9	19
139	Clamping down on myosin. Nature, 1994, 368, 98-99.	13.7	19
140	How molecular motors work in muscle. Nature, 1998, 391, 239-240.	13.7	19
141	Molecular Mechanics of Cells and Tissues. Cellular and Molecular Bioengineering, 2008, 1, 24-32.	1.0	19
142	Versatile microsphere attachment of GFP-labeled motors and other tagged proteins with preserved functionality. Journal of Biological Methods, 2015, 2, e30.	1.0	19
143	Intensity and polarization of the eyeshine in butterflies. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 1989, 166, 51.	0.7	18
144	Cellular Motors for Molecular Manufacturing. Anatomical Record, 2007, 290, 1203-1212.	0.8	18

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145	Predicted Effects of Severing Enzymes on the Length Distribution and Total Mass of Microtubules. Biophysical Journal, 2019, 117, 2066-2078.	0.2	18
146	Molecular dissection of the fibroblast-traction machinery. Cytoskeleton, 2004, 58, 175-185.	4.4	17
147	Models for ion channel gating with compliant states. Biophysical Journal, 1994, 66, 1254-1257.	0.2	16
148	Kinesin does not support the motility of zinc-macrotubes. Cytoskeleton, 1995, 30, 146-152.	4.4	16
149	Kinesin ATPase. Nature, 1993, 364, 396-396.	13.7	15
150	Three Beads Are Better Than One. Biophysical Journal, 2020, 118, 1-3.	0.2	14
151	Hearing Mechanics: A Fly in Your Ear. Current Biology, 2008, 18, R869-R870.	1.8	13
152	Ndel1-derived peptides modulate bidirectional transport of injected beads in the squid giant axon. Biology Open, 2012, 1, 220-231.	0.6	13
153	Implementation of Interference Reflection Microscopy for Label-free, High-speed Imaging of Microtubules. Journal of Visualized Experiments, 2019, , .	0.2	13
154	The extrarhabdomeral cytoskeleton in photoreceptors of Diptera. I. Labile components in the cytoplasm. Proceedings of the Royal Society of London Series B, Containing Papers of A Biological Character, 1984, 220, 339-352.	1.8	12
155	Models of Hair Cell Mechanotransduction. Current Topics in Membranes, 2007, 59, 399-424.	0.5	12
156	The force required to remove tubulin from the microtubule lattice by pulling on its Î±-tubulin C-terminal tail. Nature Communications, 2022, 13, .	5.8	11
157	Biomolecular Motors Operating in Engineered Environments. , 2005, , 185-199.		10
158	Ciliary beating patterns map onto a low-dimensional behavioural space. Nature Physics, 2022, 18, 332-337.	6.5	10
159	Contribution of increasing plasma membrane to the energetic cost of early zebrafish embryogenesis. Molecular Biology of the Cell, 2020, 31, 520-526.	0.9	9
160	Dynamic instability of dendrite tips generates the highly branched morphologies of sensory neurons. Science Advances, 2022, 8, .	4.7	9
161	Analysing the ATP Turnover Cycle of Microtubule Motors. Methods in Molecular Biology, 2011, 777, 177-192.	0.4	8
162	Coated microspheres as enhanced probes for optical trapping. , 2008, , .		7

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163	One giant step for kinesin. Nature, 1993, 365, 696-697.	13.7	6
164	Molecular Motors: Single-Molecule Recordings Made Easy. Current Biology, 2002, 12, R203-R205.	1.8	4
165	Focal laser stimulation of fly nociceptors activates distinct axonal and dendritic Ca2+ signals. Biophysical Journal, 2021, 120, 3222-3233.	0.2	4
166	In Vitro Reconstitution of Microtubule Dynamics and Severing Imaged by Label-Free Interference-Reflection Microscopy. Methods in Molecular Biology, 2022, 2430, 73-91.	0.4	4
167	Kinesins: Processivity and Chemomechanical Coupling. , 0, , 243-269.		3
168	Breaking of bonds between a kinesin motor and microtubules causes protein friction. , 2010, , .		3
169	Scientists' oath?. Nature, 1984, 312, 96-96.	13.7	2
170	Wrestling with kinesin. Nature, 1993, 364, 390-391.	13.7	2
171	Nicotinamide adenine dinucleotides and their precursor NMN have no direct effect on microtubule dynamics in purified brain tubulin. PLoS ONE, 2019, 14, e0220794.	1.1	2
172	Purification of Ciliary Tubulin from Chlamydomonas reinhardtii. Current Protocols in Protein Science, 2020, 100, e107.	2.8	2
173	Functional Surface Attachment in a Sandwich Geometry of GFP-Labeled Motor Proteins. Methods in Molecular Biology, 2011, 778, 11-18.	0.4	2
174	Counting fluorescently labeled proteins in tissues in the spinningâ€"disk microscope using singleâ€"molecule calibrations. Molecular Biology of the Cell, 2022, 33, mbcE21120618.	0.9	2
175	Surface Imaging by Self-propelled Nanoscale Probes. Microscopy and Microanalysis, 2002, 8, 1092-1093.	0.2	1
176	In Vitro Gliding Assays Indicate that Chlamydomonas Dynein Moves Microtubules Polymerized from Chlamydomonas Axonemal Tubulin Faster than those Polymerized from Porcine Brain Tubulin. Biophysical Journal, 2012, 102, 371a-372a.	0.2	1
177	Computational modeling of dynein activity and the generation of flagellar beating waveforms. , 2018, , 192-212.		1
178	Bundling, sliding, and pulling microtubules in cells and in silico. HFSP Journal, 2007, 1, 11-14.	2.5	0
179	Kinetics of Microtubule Assembly. Biophysical Journal, 2011, 100, 530a-531a.	0.2	0
180	Hybrid four-headed myosin motor engineered with antagonistic motor domains. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 15663-15664.	3.3	0

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181	Kinesin-8 is a Weak Motor Protein with a Weakly Bound Slip State. Biophysical Journal, 2012, 102, 38a.	0.2	0
182	Stu2p, the Budding Yeast Homologue of XMAP215, is a Weak Microtubule Polymerase that Promotes Rescues. Biophysical Journal, 2012, 102, 700a.	0.2	0
183	The Forces that Center the Mitotic Spindle. Biophysical Journal, 2012, 102, 223a.	0.2	0
184	Characterization of the Beat of Chlamydomonas Axonemes. Biophysical Journal, 2012, 102, 372a.	0.2	0
185	Measuring the Mechanical Properties of the Mechanism Centering the Mitotic Spindle in C. Elegans. Biophysical Journal, 2012, 102, 346a.	0.2	0
186	A Brief Scientific Biography of Prof. Alan J. Hunt. Cellular and Molecular Bioengineering, 2013, 6, 356-360.	1.0	0
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