Jonathon Howard

List of Publications by Year
in descending order

192 papers	23,224 citations	6606 79 h-index	8852 145 g-index
223 all docs	223 docs citations	223 times ranked	14373 citing authors

#	Article	IF	Citations
1	Ciliary beating patterns map onto a low-dimensional behavioural space. Nature Physics, 2022, 18, 332-337.	6.5	10
2	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
3	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
4	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
5	Dynamic instability of dendrite tips generates the highly branched morphologies of sensory neurons. Science Advances, 2022, 8, .	4.7	9
6	Cutting, Amplifying, and Aligning Microtubules with Severing Enzymes. Trends in Cell Biology, 2021, 31, 50-61.	3.6	51
7	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
8	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
9	Focal laser stimulation of fly nociceptors activates distinct axonal and dendritic Ca2+ signals. Biophysical Journal, 2021, 120, 3222-3233.	0.2	4
10	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
11	Three Beads Are Better Than One. Biophysical Journal, 2020, 118, 1-3.	0.2	14
12	Purification of Ciliary Tubulin from Chlamydomonas reinhardtii. Current Protocols in Protein Science, 2020, 100, e107.	2.8	2
13	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
14	Predicted Effects of Severing Enzymes on the Length Distribution and Total Mass of Microtubules. Biophysical Journal, 2019, 117, 2066-2078.	0.2	18
15	The Kinetics of Nucleotide Binding to Isolated Chlamydomonas Axonemes Using UV-TIRF Microscopy. Biophysical Journal, 2019, 117, 679-687.	0.2	0
16	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
17	Implementation of Interference Reflection Microscopy for Label-free, High-speed Imaging of Microtubules. Journal of Visualized Experiments, 2019, , .	0.2	13
18	Heat Oscillations Driven by the Embryonic Cell Cycle Reveal the Energetic Costs of Signaling. Developmental Cell, 2019, 48, 646-658.e6.	3.1	54

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19	Force Generated by Two Kinesin Motors Depends on the Load Direction and Intermolecular Coupling. Physical Review Letters, 2019, 122, 188101.	2.9	55
20	The dynamic and structural properties of axonemal tubulins support the high length stability of cilia. Nature Communications, 2019, 10, 1838.	5.8	50
21	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
22	Structural Biology: Piezo Senses Tension through Curvature. Current Biology, 2018, 28, R357-R359.	1.8	31
23	Stars take centre stage. Nature Physics, 2018, 14, 778-779.	6.5	0
24	Labelâ€free highâ€speed wideâ€field imaging of single microtubules using interference reflection microscopy. Journal of Microscopy, 2018, 272, 60-66.	0.8	69
25	Computational modeling of dynein activity and the generation of flagellar beating waveforms. , 2018, , 192-212.		1
26	Physical Limits on the Precision of Mitotic Spindle Positioning by Microtubule Pushing forces. BioEssays, 2017, 39, 1700122.	1.2	40
27	Motor Coordination Underlying the Flagellar Beat in Chlamydomonas. Biophysical Journal, 2016, 110, 32a.	0.2	0
28	A force-generating machinery maintains the spindle at the cell center during mitosis. Science, 2016, 352, 1124-1127.	6.0	138
29	Independent Control of the Static and Dynamic Components of the Chlamydomonas Flagellar Beat. Current Biology, 2016, 26, 1098-1103.	1.8	50
30	Microtubules: 50 years on from the discovery of tubulin. Nature Reviews Molecular Cell Biology, 2016, 17, 322-328.	16.1	67
31	Broken detailed balance at mesoscopic scales in active biological systems. Science, 2016, 352, 604-607.	6.0	259
32	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
33	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
34	Curvature regulation of the ciliary beat through axonemal twist. Physical Review E, 2016, 94, 042426.	0.8	30
35	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
36	Splicing of Nascent RNA Coincides with Intron Exit from RNA Polymerase II. Cell, 2016, 165, 372-381.	13.5	196

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37	Dynamic curvature regulation accounts for the symmetric and asymmetric beats of Chlamydomonas flagella. ELife, 2016, 5, .	2.8	136
38	Regulation of Microtubule Growth and Catastrophe: Unifying Theory and Experiment. Trends in Cell Biology, 2015, 25, 769-779.	3.6	85
39	Versatile microsphere attachment of GFP-labeled motors and other tagged proteins with preserved functionality. Journal of Biological Methods, 2015, 2, e30.	1.0	19
40	Kinesin Kip2 enhances microtubule growth in vitro through length-dependent feedback on polymerization and catastrophe. ELife, 2015, 4, .	2.8	44
41	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
42	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
43	The Motility of Axonemal Dynein Is Regulated by the Tubulin Code. Biophysical Journal, 2014, 107, 2872-2880.	0.2	67
44	Measurement of the Force that Centers the Mitotic Spindle in the Early C.Âelegans Embryo using Magnetic Tweezers. Biophysical Journal, 2014, 106, 168a.	0.2	0
45	Statistical Constraints on Dendritic Branching Morphology in Drosophila Class IV Sensory Neurons. Biophysical Journal, 2014, 106, 794a.	0.2	0
46	The Complexity of Larval Class IV Sensory Neurons in Drosophila is Accounted for by a Set of Statistical Branching Rules. Biophysical Journal, 2014, 106, 793a-794a.	0.2	0
47	Quantitative cell biology: the essential role of theory. Molecular Biology of the Cell, 2014, 25, 3438-3440.	0.9	24
48	Motor Regulation Results in Distal Forces that Bend Partially Disintegrated Chlamydomonas Axonemes into Circular Arcs. Biophysical Journal, 2014, 106, 2434-2442.	0.2	23
49	XMAP215 activity sets spindle length by controlling the total mass of spindle microtubules. Nature Cell Biology, 2013, 15, 1116-1122.	4.6	115
50	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
51	A Brief Scientific Biography of Prof. Alan J. Hunt. Cellular and Molecular Bioengineering, 2013, 6, 356-360.	1.0	0
52	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
53	Microtubule catastrophe and rescue. Current Opinion in Cell Biology, 2013, 25, 14-22.	2.6	151
54	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

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55	Microtubule dynamic instability: A new model with coupled GTP hydrolysis and multistep catastrophe. BioEssays, 2013, 35, 452-461.	1.2	148
56	Synergy between XMAP215 and EB1 increases microtubule growth rates to physiological levels. Nature Cell Biology, 2013, 15, 688-693.	4.6	160
57	Kinesin-8 Is a Low-Force Motor Protein with a Weakly Bound Slip State. Biophysical Journal, 2013, 104, 2456-2464.	0.2	57
58	Reconstitution of Flagellar Sliding. Methods in Enzymology, 2013, 524, 343-369.	0.4	27
59	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
60	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
61	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
62	Ndel1-derived peptides modulate bidirectional transport of injected beads in the squid giant axon. Biology Open, 2012, 1, 220-231.	0.6	13
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	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
65	Drosophila Auditory Organ Genes and Genetic Hearing Defects. Cell, 2012, 150, 1042-1054.	13.5	197
66	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
67	Kinesin-8 is a Weak Motor Protein with a Weakly Bound Slip State. Biophysical Journal, 2012, 102, 38a.	0.2	0
68	The Highly Processive Kinesin-8, Kip3, Switches Microtubule Protofilaments with a Bias toward the Left. Biophysical Journal, 2012, 103, L4-L6.	0.2	59
69	Stu2p, the Budding Yeast Homologue of XMAP215, is a Weak Microtubule Polymerase that Promotes Rescues. Biophysical Journal, 2012, 102, 700a.	0.2	0
70	The Forces that Center the Mitotic Spindle. Biophysical Journal, 2012, 102, 223a.	0.2	0
71	Characterization of the Beat of Chlamydomonas Axonemes. Biophysical Journal, 2012, 102, 372a.	0.2	0
72	Measuring the Mechanical Properties of the Mechanism Centering the Mitotic Spindle in C. Elegans. Biophysical Journal, 2012, 102, 346a.	0.2	0

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73	Islands Containing Slowly Hydrolyzable GTP Analogs Promote Microtubule Rescues. PLoS ONE, 2012, 7, e30103.	1.1	48
74	Minimum-energy vesicle and cell shapes calculated using spherical harmonics parameterization. Soft Matter, 2011, 7, 2138.	1.2	40
75	Purification of Tubulin from Porcine Brain. Methods in Molecular Biology, 2011, 777, 15-28.	0.4	68
76	Kinetics of Microtubule Assembly. Biophysical Journal, 2011, 100, 530a-531a.	0.2	0
77	Rapid Microtubule Self-Assembly Kinetics. Cell, 2011, 146, 582-592.	13.5	201
78	Depolymerizing Kinesins Kip3 and MCAK Shape Cellular Microtubule Architecture by Differential Control of Catastrophe. Cell, 2011, 147, 1092-1103.	13.5	201
79	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
80	Turing's next steps: the mechanochemical basis of morphogenesis. Nature Reviews Molecular Cell Biology, 2011, 12, 392-398.	16.1	236
81	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
82	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
83	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
84	The kinesin-13 MCAK has an unconventional ATPase cycle adapted for microtubule depolymerization. EMBO Journal, 2011, 30, 3928-3939.	3.5	68
85	Analysing the ATP Turnover Cycle of Microtubule Motors. Methods in Molecular Biology, 2011, 777, 177-192.	0.4	8
86	Functional Surface Attachment in a Sandwich Geometry of GFP-Labeled Motor Proteins. Methods in Molecular Biology, 2011, 778, 11-18.	0.4	2
87	A doublecortin containing microtubule-associated protein is implicated in mechanotransduction in Drosophila sensory cilia. Nature Communications, 2010, 1, 11.	5.8	52
88	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
89	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
90	Breaking of bonds between a kinesin motor and microtubules causes protein friction. , 2010, , .		3

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91	Studying Kinesin Motors by Optical 3D-Nanometry in Gliding Motility Assays. Methods in Cell Biology, 2010, 95, 247-271.	0.5	47
92	Microtubule Dynamics Reconstituted In Vitro and Imaged by Single-Molecule Fluorescence Microscopy. Methods in Cell Biology, 2010, 95, 221-245.	0.5	239
93	Drawing an elephant with four complex parameters. American Journal of Physics, 2010, 78, 648-649.	0.3	116
94	Membrane Invaginations Reveal Cortical Sites that Pull on Mitotic Spindles in One-Cell C. elegans Embryos. PLoS ONE, 2010, 5, e12301.	1.1	96
95	Protein Friction Limits Diffusive and Directed Movements of Kinesin Motors on Microtubules. Science, 2009, 325, 870-873.	6.0	196
96	Growth, fluctuation and switching at microtubule plus ends. Nature Reviews Molecular Cell Biology, 2009, 10, 569-574.	16.1	152
97	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
98	Kinesin-8 Motors Act Cooperatively to Mediate Length-Dependent Microtubule Depolymerization. Cell, 2009, 138, 1174-1183.	13.5	263
99	Mechanical Signaling in Networks of Motor and Cytoskeletal Proteins. Annual Review of Biophysics, 2009, 38, 217-234.	4.5	85
100	EB1 Recognizes the Nucleotide State of Tubulin in the Microtubule Lattice. PLoS ONE, 2009, 4, e7585.	1.1	137
101	Molecular Mechanics of Cells and Tissues. Cellular and Molecular Bioengineering, 2008, 1, 24-32.	1.0	19
102	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
103	Spherical harmonics-based parametric deconvolution of 3D surface images using bending energy minimization. Medical Image Analysis, 2008, 12, 217-227.	7.0	22
104	Hearing Mechanics: A Fly in Your Ear. Current Biology, 2008, 18, R869-R870.	1.8	13
105	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
106	Optical trapping of coated microspheres. Optics Express, 2008, 16, 13831.	1.7	88
107	XMAP215 Is a Processive Microtubule Polymerase. Cell, 2008, 132, 79-88.	13.5	479
108	Coated microspheres as enhanced probes for optical trapping. , 2008, , .		7

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109	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
110	Bundling, sliding, and pulling microtubules in cells and in silico. HFSP Journal, 2007, 1, 11-14.	2.5	0
111	How molecular motors shape the flagellar beat. HFSP Journal, 2007, 1, 192-208.	2.5	278
112	Models of Hair Cell Mechanotransduction. Current Topics in Membranes, 2007, 59, 399-424.	0.5	12
113	Surface Forces and Drag Coefficients of Microspheres near a Plane Surface Measured with Optical Tweezers. Langmuir, 2007, 23, 3654-3665.	1.6	220
114	Cellular Motors for Molecular Manufacturing. Anatomical Record, 2007, 290, 1203-1212.	0.8	18
115	LED illumination for videoâ€enhanced DIC imaging of single microtubules. Journal of Microscopy, 2007, 226, 1-5.	0.8	50
116	Microtubule polymerases and depolymerases. Current Opinion in Cell Biology, 2007, 19, 31-35.	2.6	267
117	Straight GDP-Tubulin Protofilaments Form in the Presence of Taxol. Current Biology, 2007, 17, 1765-1770.	1.8	179
118	Calibration of optical tweezers with positional detection in the back focal plane. Review of Scientific Instruments, 2006, 77, 103101.	0.6	294
119	Parallel Manipulation of Bifunctional DNA Molecules on Structured Surfaces Using Kinesin-Driven Microtubules. Small, 2006, 2, 1090-1098.	5.2	65
120	Yeast kinesin-8 depolymerizes microtubules in a length-dependent manner. Nature Cell Biology, 2006, 8, 957-962.	4.6	426
121	The depolymerizing kinesin MCAK uses lattice diffusion to rapidly target microtubule ends. Nature, 2006, 441, 115-119.	13.7	408
122	Protein power strokes. Current Biology, 2006, 16, R517-R519.	1.8	59
123	Spindle Oscillations during Asymmetric Cell Division Require a Threshold Number of Active Cortical Force Generators. Current Biology, 2006, 16, 2111-2122.	1.8	177
124	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
125	Elastic and damping forces generated by confined arrays of dynamic microtubules. Physical Biology, 2006, 3, 54-66.	0.8	78
126	A Self-Organized Vortex Array of Hydrodynamically Entrained Sperm Cells. Science, 2005, 309, 300-303.	6.0	492

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127	Biomolecular Motors Operating in Engineered Environments. , 2005, , 185-199.		10
128	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
129	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
130	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
131	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
132	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
133	Molecular dissection of the fibroblast-traction machinery. Cytoskeleton, 2004, 58, 175-185.	4.4	17
134	Creating nanoscopic collagen matrices using atomic force microscopy. Microscopy Research and Technique, 2004, 64, 435-440.	1.2	43
135	A standardized kinesin nomenclature. Journal of Cell Biology, 2004, 167, 19-22.	2.3	662
136	Assembly of collagen into microribbons: effects of pH and electrolytes. Journal of Structural Biology, 2004, 148, 268-278.	1.3	208
137	The Distribution of Active Force Generators Controls Mitotic Spindle Position. Science, 2003, 301, 518-521.	6.0	351
138	Dynamics and mechanics of the microtubule plus end. Nature, 2003, 422, 753-758.	13.7	666
139	Analysis of Microtubule Guidance in Open Microfabricated Channels Coated with the Motor Protein Kinesinâ€. Langmuir, 2003, 19, 1738-1744.	1.6	117
140	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
141	Stretching and Transporting DNA Molecules Using Motor Proteins. Nano Letters, 2003, 3, 1251-1254.	4.5	161
142	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
143	Reconstitution and Characterization of Budding Yeast Î³-Tubulin Complex. Molecular Biology of the Cell, 2002, 13, 1144-1157.	0.9	80
144	Surface Imaging by Self-Propelled Nanoscale Probes. Nano Letters, 2002, 2, 113-116.	4.5	100

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145	A Piconewton Forcemeter Assembled from Microtubules and Kinesins. Nano Letters, 2002, 2, 1113-1115.	4.5	89
146	Surface Imaging by Self-propelled Nanoscale Probes. Microscopy and Microanalysis, 2002, 8, 1092-1093.	0.2	1
147	Molecular Motors: Single-Molecule Recordings Made Easy. Current Biology, 2002, 12, R203-R205.	1.8	4
148	Light-Controlled Molecular Shuttles Made from Motor Proteins Carrying Cargo on Engineered Surfaces. Nano Letters, 2001, 1, 235-239.	4.5	313
149	Conformational changes during kinesin motility. Current Opinion in Cell Biology, 2001, 13, 19-28.	2.6	126
150	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
151	Molecular shuttles: directed motion of microtubules along nanoscale kinesin tracks. Nanotechnology, 1999, 10, 232-236.	1.3	145
152	Kinesin Takes One 8-nm Step for Each ATP That It Hydrolyzes. Journal of Biological Chemistry, 1999, 274, 3667-3671.	1.6	311
153	Kinesinâ€™s tail domain is an inhibitory regulator of the motor domain. Nature Cell Biology, 1999, 1, 288-292.	4.6	269
154	How molecular motors work in muscle. Nature, 1998, 391, 239-240.	13.7	19
155	Processivity of the Motor Protein Kinesin Requires Two Heads. Journal of Cell Biology, 1998, 140, 1395-1405.	2.3	261
156	Molecular motors: structural adaptations to cellular functions. Nature, 1997, 389, 561-567.	13.7	480
157	Directional loading of the kinesin motor molecule as it buckles a microtubule. Biophysical Journal, 1996, 70, 418-429.	0.2	147
158	The Movement of Kinesin Along Microtubules. Annual Review of Physiology, 1996, 58, 703-729.	5.6	222
159	Kinesin does not support the motility of zinc-macrotubes. Cytoskeleton, 1995, 30, 146-152.	4.4	16
160	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
161	Rigidity of microtubules is increased by stabilizing agents.. Journal of Cell Biology, 1995, 130, 909-917.	2.3	306
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163	The force exerted by a single kinesin molecule against a viscous load. Biophysical Journal, 1994, 67, 766-781.	0.2	343
164	Models for ion channel gating with compliant states. Biophysical Journal, 1994, 66, 1254-1257.	0.2	16
165	Organelle transport and sorting in axons. Current Opinion in Neurobiology, 1994, 4, 662-667.	2.0	33
166	Wrestling with kinesin. Nature, 1993, 364, 390-391.	13.7	2
167	Kinesin ATPase. Nature, 1993, 364, 396-396.	13.7	15
168	One giant step for kinesin. Nature, 1993, 365, 696-697.	13.7	6
169	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
170	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
171	Chapter 10 Assay of Microtubule Movement Driven by Single Kinesin Molecules. Methods in Cell Biology, 1993, 39, 137-147.	0.5	104
172	Kinesin follows the microtubule's protofilament axis.. Journal of Cell Biology, 1993, 121, 1083-1093.	2.3	343
173	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
174	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
175	Movement of microtubules by single kinesin molecules. Nature, 1989, 342, 154-158.	13.7	897
176	Optics of the butterfly eye. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 1988, 162, 341-366.	0.7	74
177	Mechanoelectrical Transduction by Hair Cells. Annual Review of Biophysics and Biophysical Chemistry, 1988, 17, 99-124.	12.2	262
178	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
179	Hair Cells: Transduction, Tuning, and Transmission in the Inner Ear. Annual Review of Cell Biology, 1988, 4, 63-92.	26.0	176
180	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

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182	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
183	Stiffness of sensory hair bundles in the sacculus of the frog. Hearing Research, 1986, 23, 93-104.	0.9	133
184	Scientists' oath?. Nature, 1984, 312, 96-96.	13.7	2
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186	The dynamics of phototransduction in insects. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 1984, 154, 707-718.	0.7	108
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