J Richard Mcintosh

List of Publications by Year
in descending order

94	9,413	46918 47	46693 89
papers	citations	h-index	g-index

98	98	98	6801
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The Molecular Architecture of Axonemes Revealed by Cryoelectron Tomography. Science, 2006, 313, 944-948.	6.0	831
2	A standardized kinesin nomenclature. Journal of Cell Biology, 2004, 167, 19-22.	2.3	662
3	Golgi Structure in Three Dimensions: Functional Insights from the Normal Rat Kidney Cell. Journal of Cell Biology, 1999, 144, 1135-1149.	2.3	607
4	New views of cells in 3D: an introduction to electron tomography. Trends in Cell Biology, 2005, 15, 43-51.	3.6	378
5	Unstable Kinetochore-Microtubule Capture and Chromosomal Instability Following Deletion of CENP-E. Developmental Cell, 2002, 3, 351-365.	3.1	295
6	High-Voltage Electron Tomography of Spindle Pole Bodies and Early Mitotic Spindles in the YeastSaccharomyces cerevisiae. Molecular Biology of the Cell, 1999, 10, 2017-2031.	0.9	272
7	Force production by disassembling microtubules. Nature, 2005, 438, 384-388.	13.7	252
8	A Cytoplasmic Dynein Heavy Chain Is Required for Oscillatory Nuclear Movement of Meiotic Prophase and Efficient Meiotic Recombination in Fission Yeast. Journal of Cell Biology, 1999, 145, 1233-1250.	2.3	244
9	Chromosome-Microtubule Interactions During Mitosis. Annual Review of Cell and Developmental Biology, 2002, 18, 193-219.	4.0	223
10	Activation of the MKK/ERK Pathway during Somatic Cell Mitosis: Direct Interactions of Active ERK with Kinetochores and Regulation of the Mitotic 3F3/2 Phosphoantigen. Journal of Cell Biology, 1998, 142, 1533-1545.	2.3	217
11	Visualization of the structural polarity of microtubules. Nature, 1980, 286, 517-519.	13.7	203
12	Cryoâ€fluorescence microscopy facilitates correlations between light and cryoâ€electron microscopy and reduces the rate of photobleaching. Journal of Microscopy, 2007, 227, 98-109.	0.8	203
13	THE DISTRIBUTION OF SPINDLE MICROTUBULES DURING MITOSIS IN CULTURED HUMAN CELLS. Journal of Cell Biology, 1971, 49, 468-497.	2.3	187
14	Fibrils Connect Microtubule Tips with Kinetochores: A Mechanism to Couple Tubulin Dynamics to Chromosome Motion. Cell, 2008, 135, 322-333.	13.5	186
15	Minus-end-directed motion of kinesinâ€“coated microspheres driven by microtubule depolymerization. Nature, 1995, 373, 161-164.	13.7	179
16	cut11⁺: A Gene Required for Cell Cycle-dependent Spindle Pole Body Anchoring in the Nuclear Envelope and Bipolar Spindle Formation inSchizosaccharomyces pombe. Molecular Biology of the Cell, 1998, 9, 2839-2855.	0.9	158
17	Organization of Interphase Microtubules in Fission Yeast Analyzed by Electron Tomography. Developmental Cell, 2007, 12, 349-361.	3.1	158
18	FcRn-mediated antibody transport across epithelial cells revealed by electron tomography. Nature, 2008, 455, 542-546.	13.7	150

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19	Three-dimensional Organization of Basal Bodies from Wild-Type and Î´-Tubulin Deletion Strains ofChlamydomonas reinhardtii. Molecular Biology of the Cell, 2003, 14, 2999-3012.	0.9	145
20	Morphologically distinct microtubule ends in the mitotic centrosome of Caenorhabditis elegans. Journal of Cell Biology, 2003, 163, 451-456.	2.3	144
21	Microtubules grow by the addition of bent guanosine triphosphate tubulin to the tips of curved protofilaments. Journal of Cell Biology, 2018, 217, 2691-2708.	2.3	142
22	Two Related Kinesins,klp5⁺andklp6⁺, Foster Microtubule Disassembly and Are Required for Meiosis in Fission Yeast. Molecular Biology of the Cell, 2001, 12, 3919-3932.	0.9	139
23	Slk19p Is a Centromere Protein That Functions to Stabilize Mitotic Spindles. Journal of Cell Biology, 1999, 146, 415-425.	2.3	136
24	INTERMICROTUBULE BRIDGES IN MITOTIC SPINDLE APPARATUS. Journal of Cell Biology, 1970, 45, 438-444.	2.3	131
25	Kinesinsklp5+ andklp6+ are required for normal chromosome movement in mitosis. Journal of Cell Science, 2002, 115, 931-940.	1.2	129
26	Structure of the Golgi and Distribution of Reporter Molecules at 20Â°C Reveals the Complexity of the Exit Compartments. Molecular Biology of the Cell, 2002, 13, 2810-2825.	0.9	124
27	Biophysics of mitosis. Quarterly Reviews of Biophysics, 2012, 45, 147-207.	2.4	122
28	Regulation of microtubule dynamics, mechanics and function through the growing tip. Nature Reviews Molecular Cell Biology, 2021, 22, 777-795.	16.1	119
29	Kinesins klp5(+) and klp6(+) are required for normal chromosome movement in mitosis. Journal of Cell Science, 2002, 115, 931-40.	1.2	116
30	pkl1⁺andklp2⁺: Two Kinesins of the Kar3 Subfamily in Fission Yeast Perform Different Functions in Both Mitosis and Meiosis. Molecular Biology of the Cell, 2001, 12, 3476-3488.	0.9	114
31	Electron Microscopy of Cells. Journal of Cell Biology, 2001, 153, F25-F32.	2.3	109
32	Microtubule depolymerization can drive poleward chromosome motion in fission yeast. EMBO Journal, 2006, 25, 4888-4896.	3.5	108
33	Augmin-dependent microtubule nucleation at microtubule walls in the spindle. Journal of Cell Biology, 2013, 202, 25-33.	2.3	105
34	A Molecular-Mechanical Model of the Microtubule. Biophysical Journal, 2005, 88, 3167-3179.	0.2	104
35	Mitosis. Cold Spring Harbor Perspectives in Biology, 2016, 8, a023218.	2.3	92
36	The Dam1 ring binds microtubules strongly enough to be a processive as well as energy-efficient coupler for chromosome motion. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 15423-15428.	3.3	87

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37	Tubulin depolymerization may be an ancient biological motor. Journal of Cell Science, 2010, 123, 3425-3434.	1.2	83
38	Conserved and divergent features of kinetochores and spindle microtubule ends from five species. Journal of Cell Biology, 2013, 200, 459-474.	2.3	81
39	Kinesin-8 from Fission Yeast: A Heterodimeric, Plus-Endâ€“directed Motor that Can Couple Microtubule Depolymerization to Cargo Movement. Molecular Biology of the Cell, 2009, 20, 963-972.	0.9	77
40	STUDIES ON THE MECHANISM OF MITOSIS. Annals of the New York Academy of Sciences, 1975, 253, 407-427.	1.8	75
41	Probing the macromolecular organization of cells by electron tomography. Current Opinion in Cell Biology, 2009, 21, 89-96.	2.6	75
42	Identification and immunolocalization of cytoplasmic dynein indictyostelium. Cytoskeleton, 1990, 15, 51-62.	4.4	73
43	In search of an optimal ring to couple microtubule depolymerization to processive chromosome motions. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 19017-19022.	3.3	71
44	Long tethers provide high-force coupling of the Dam1 ring to shortening microtubules. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 7708-7713.	3.3	64
45	A microtubule-associated protein in the mitotic spindle and the interphase nucleus. Nature, 1982, 295, 248-250.	13.7	63
46	Electron tomography reveals aspects of spindle structure important for mechanical stability at metaphase. Molecular Biology of the Cell, 2020, 31, 184-195.	0.9	57
47	Cryo-electron tomography and 3-D analysis of the intact flagellum in Trypanosoma brucei. Journal of Structural Biology, 2012, 178, 189-198.	1.3	56
48	Physical determinants of bipolar mitotic spindle assembly and stability in fission yeast. Science Advances, 2017, 3, e1601603.	4.7	56
49	Crystal morphology of MV-1 magnetite. American Mineralogist, 2002, 87, 1727-1730.	0.9	50
50	Lattice Structure of Cytoplasmic Microtubules in a Cultured Mammalian Cell. Journal of Molecular Biology, 2009, 394, 177-182.	2.0	50
51	Electron tomography reveals a flared morphology on growing microtubule ends. Journal of Cell Science, 2011, 124, 693-698.	1.2	49
52	The ultrastructure ofPyrsonympha and its associated microorganisms. Journal of Morphology, 1974, 143, 77-105.	0.6	48
53	Electron tomography of yeast cells. Methods in Enzymology, 2002, 351, 81-96.	0.4	47
54	Three-Dimensional Structure of the Ultraoligotrophic Marine Bacterium â€œCandidatus Pelagibacter ubiqueâ€• Applied and Environmental Microbiology, 2017, 83, .	1.4	47

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55	Mechanisms of microtubule dynamics and force generation examined with computational modeling and electron cryotomography. Nature Communications, 2020, 11, 3765.	5.8	47
56	The Dynamic Behavior of Individual Microtubules Associated with Chromosomes In Vitro. Molecular Biology of the Cell, 1998, 9, 2857-2871.	0.9	46
57	Vitreous cryo-sectioning of cells facilitated by a micromanipulator. Journal of Microscopy, 2006, 224, 129-134.	0.8	46
58	Centromere protein F includes two sites that couple efficiently to depolymerizing microtubules. Journal of Cell Biology, 2015, 209, 813-828.	2.3	46
59	Contributions of Microtubule Dynamic Instability and Rotational Diffusion to Kinetochore Capture. Biophysical Journal, 2017, 112, 552-563.	0.2	42
60	Mechanisms of chromosome biorientation and bipolar spindle assembly analyzed by computational modeling. ELife, 2020, 9, .	2.8	40
61	Mitotic Chromosome Biorientation in Fission Yeast Is Enhanced by Dynein and a Minus-endâ€“directed, Kinesin-like Protein. Molecular Biology of the Cell, 2007, 18, 2216-2225.	0.9	39
62	Kinesin-8 effects on mitotic microtubule dynamics contribute to spindle function in fission yeast. Molecular Biology of the Cell, 2016, 27, 3490-3514.	0.9	37
63	Single-strand DNA Aptamers as Probes for Protein Localization in Cells. Journal of Histochemistry and Cytochemistry, 2003, 51, 797-808.	1.3	34
64	A freeze substitution fixation-based gold enlarging technique for EM studies of endocytosed Nanogold-labeled molecules. Journal of Structural Biology, 2007, 160, 103-113.	1.3	31
65	A Brief History of Research on Mitotic Mechanisms. Biology, 2016, 5, 55.	1.3	27
66	Cell biology: Microtubule catastrophe. Nature, 1984, 312, 196-197.	13.7	25
67	Rings around kinetochore microtubules in yeast. Nature Structural and Molecular Biology, 2005, 12, 210-212.	3.6	25
68	CENP-meta, an Essential Kinetochore Kinesin Required for the Maintenance of Metaphase Chromosome Alignment in Drosophila. Journal of Cell Biology, 2000, 150, 1-12.	2.3	25
69	Dynamics of a fluorescent calmodulin analog in the mammalian mitotic spindle at metaphase. Cytoskeleton, 1988, 9, 231-242.	4.4	19
70	Life cycles of yeast spindle pole bodies: Getting microtubules into a closed nucleus. Biology of the Cell, 1999, 91, 305-312.	0.7	19
71	Assessing the Contributions of Motor Enzymes and Microtubule Dynamics to Mitotic Chromosome Motions. Annual Review of Cell and Developmental Biology, 2017, 33, 1-22.	4.0	18
72	Silver enhancement of Nanogold particles during freeze substitution for electron microscopy. Journal of Microscopy, 2008, 230, 263-267.	0.8	17

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73	Molecular Characterization of a Cytoplasmic Dynein from Dictyostelium. Journal of Eukaryotic Microbiology, 1994, 41, 645-651.	0.8	14
74	Cytoskeleton: Dynamic microtubule dynamics. Nature, 1986, 324, 106-107.	13.7	13
75	Chromosome segregation in fission yeast with mutations in the tubulin folding cofactor D. Current Genetics, 2006, 50, 281-294.	0.8	12
76	A Screen for Genes Involved in the Anaphase Proteolytic Pathway Identifies tsm1+, a Novel Schizosaccharomyces pombe Gene Important for Microtubule Integrity. Genetics, 1998, 149, 1251-1264.	1.2	12
77	Dynamics of Tubulin and Calmodulin in the Mammalian Mitotic Spindle. Annals of the New York Academy of Sciences, 1986, 466, 566-579.	1.8	11
78	Two distinct isoforms of sea urchin egg dynein. Cytoskeleton, 1992, 21, 281-292.	4.4	11
79	Novel interactions of fission yeast kinesin 8 revealed through in vivo expression of truncation alleles. Cytoskeleton, 2008, 65, 626-640.	4.4	11
80	Preparing Fission Yeast for Electron Microscopy. Cold Spring Harbor Protocols, 2017, 2017, pdb.prot091314.	0.2	10
81	Large-Scale Electron Tomography of Cells Using SerialEM and IMOD. Biological and Medical Physics Series, 2018, , 95-116.	0.3	9
82	Regulation of Chromosome Speeds in Mitosis. Cellular and Molecular Bioengineering, 2013, 6, 418-430.	1.0	7
83	Anaphase A. Seminars in Cell and Developmental Biology, 2021, 117, 118-126.	2.3	5
84	An introduction to microtubules. Journal of Supramolecular Structure, 1974, 2, 385-392.	2.3	4
85	Electron Microscopy of Fission Yeast. Cold Spring Harbor Protocols, 2017, 2017, pdb.top079822.	0.2	4
86	Ultrastructural Analysis of Microtubule Ends. Methods in Molecular Biology, 2020, 2101, 191-209.	0.4	4
87	Motors or dynamics: What really moves chromosomes?. Nature Cell Biology, 2012, 14, 1234-1234.	4.6	3
88	Brownian dynamics simulation of protofilament relaxation during rapid freezing. PLoS ONE, 2021, 16, e0247022.	1.1	3
89	Mitosis futures: the past is prologue. Molecular Biology of the Cell, 2011, 22, 3933-3935.	0.9	1
90	Life cycles of yeast spindle pole bodies: Getting microtubules into a closed nucleus. , 1999, 91, 305.		1

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91	Resources for the Study of Cellular Structure by High Voltage Electron Tomography, Serial Thin Sectioning, Specific Labeling, and Image Analysis. Microscopy and Microanalysis, 1997, 3, 273-274.	0.2	0
92	A Brief Scientific Biography of Prof. Alan J. Hunt. Cellular and Molecular Bioengineering, 2013, 6, 356-360.	1.0	0
93	Richard McIntosh. Current Biology, 2019, 29, R777-R779.	1.8	0
94	Regulation of Mitotic Microtubule Dynamic Instability in Monopolar Spindles by Bundling and Kinetochore Attachment. FASEB Journal, 2017, 31, 932.6.	0.2	0