Jennifer L. Ross

List of Publications by Year
in descending order

60 papers	4,682 citations	172457 29 h-index	138484 58 g-index
63 all docs	63 docs citations	63 times ranked	5909 citing authors

#	Article	IF	Citations
1	Differential Regulation of Dynein and Kinesin Motor Proteins by Tau. Science, 2008, 319, 1086-1089.	12.6	860
2	Motor Coordination via a Tug-of-War Mechanism Drives Bidirectional Vesicle Transport. Current Biology, 2010, 20, 697-702.	3.9	377
3	Cargo transport: molecular motors navigate a complex cytoskeleton. Current Opinion in Cell Biology, 2008, 20, 41-47.	5.4	302
4	Processive bidirectional motion of dyneinâ€“dynactin complexes in vitro. Nature Cell Biology, 2006, 8, 562-570.	10.3	274
5	Huntingtin facilitates dynein/dynactin-mediated vesicle transport. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 10045-10050.	7.1	261
6	Mechanics of microtubules. Journal of Biomechanics, 2010, 43, 23-30.	2.1	207
7	Microtubule-severing enzymes at the cutting edge. Journal of Cell Science, 2012, 125, 2561-9.	2.0	188
8	Non-equilibrium assembly of microtubules: from molecules to autonomous chemical robots. Chemical Society Reviews, 2017, 46, 5570-5587.	38.1	172
9	A Switch in Retrograde Signaling from Survival to Stress in Rapid-Onset Neurodegeneration. Journal of Neuroscience, 2009, 29, 9903-9917.	3.6	168
10	Complementary dimerization of microtubule-associated tau protein: Implications for microtubule bundling and tau-mediated pathogenesis. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 7445-7450.	7.1	138
11	Kinesin and Dynein-Dynactin at Intersecting Microtubules: Motor Density Affects Dynein Function. Biophysical Journal, 2008, 94, 3115-3125.	0.5	133
12	MAP4 and CLASP1 operate as a safety mechanism to maintain a stable spindle position in mitosis. Nature Cell Biology, 2011, 13, 1040-1050.	10.3	108
13	Drosophila katanin is a microtubule depolymerase that regulates cortical-microtubule plus-end interactions and cell migration. Nature Cell Biology, 2011, 13, 361-369.	10.3	103
14	Drosophila Katanin-60 Depolymerizes and Severs at Microtubule Defects. Biophysical Journal, 2011, 100, 2440-2449.	0.5	90
15	TPX2 regulates the localization and activity of Eg5 in the mammalian mitotic spindle. Journal of Cell Biology, 2011, 195, 87-98.	5.2	84
16	Motor transport of self-assembled cargos in crowded environments. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 20814-20819.	7.1	82
17	Mechanical Properties of Doubly Stabilized Microtubule Filaments. Biophysical Journal, 2013, 104, 1517-1528.	0.5	78
18	Interplay of structure, elasticity, and dynamics in actin-based nematic materials. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E124-E133.	7.1	73

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19	Loop formation of microtubules during gliding at high density. Journal of Physics Condensed Matter, 2011, 23, 374104.	1.8	55
20	Human Fidgetin is a microtubule severing the enzyme and minus-end depolymerase that regulates mitosis. Cell Cycle, 2012, 11, 2359-2366.	2.6	55
21	Tau induces cooperative Taxol binding to microtubules. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 12910-12915.	7.1	52
22	Katanin Severing and Binding Microtubules Are Inhibited by Tubulin Carboxy Tails. Biophysical Journal, 2015, 109, 2546-2561.	0.5	49
23	Manipulating Protein Adsorption using a Patchy Protein-Resistant Brush. Langmuir, 2010, 26, 12147-12154.	3.5	48
24	Dynamic reorganization of Eg5 in the mammalian spindle throughout mitosis requires dynein and TPX2. Molecular Biology of the Cell, 2012, 23, 1254-1266.	2.1	48
25	Direct Single Molecule Imaging of Enhanced Enzyme Diffusion. Physical Review Letters, 2019, 123, 128101.	7.8	47
26	The Dark Matter of Biology. Biophysical Journal, 2016, 111, 909-916.	0.5	46
27	Perturbations in Microtubule Mechanics from Tubulin Preparation. Cellular and Molecular Bioengineering, 2012, 5, 227-238.	2.1	39
28	Microtubule organization by kinesin motors and microtubule crosslinking protein MAP65. Journal of Physics Condensed Matter, 2013, 25, 374103.	1.8	37
29	Type 3 Secretion Translocators Spontaneously Assemble a Hexadecameric Transmembrane Complex. Journal of Biological Chemistry, 2016, 291, 6304-6315.	3.4	33
30	TPX2 Inhibits Eg5 by Interactions with Both Motor and Microtubule. Journal of Biological Chemistry, 2015, 290, 17367-17379.	3.4	32
31	Control of molecular shuttles by designing electrical and mechanical properties of microtubules. Science Robotics, 2017, 2, .	17.6	31
32	Single Molecule Investigation of Kinesin-1 Motility Using Engineered Microtubule Defects. Scientific Reports, 2017, 7, 44290.	3.3	28
33	Studying Plus-End Tracking at Single Molecule Resolution Using TIRF Microscopy. Methods in Cell Biology, 2010, 95, 543-554.	1.1	27
34	Multiple Color Single Molecule TIRF Imaging and Tracking of MAPs and Motors. Methods in Cell Biology, 2010, 95, 521-542.	1.1	25
35	Mobility of Taxol in Microtubule Bundles. Biophysical Journal, 2003, 84, 3959-3967.	0.5	24
36	Invited review: Microtubule severing enzymes couple atpase activity with tubulin GTPase spring loading. Biopolymers, 2016, 105, 547-556.	2.4	24

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37	Contractility in an extensile system. Soft Matter, 2017, 13, 4268-4277.	2.7	24
38	Self-organization of spindle-like microtubule structures. Soft Matter, 2019, 15, 4797-4807.	2.7	23
39	Microtubule orientation and spacing within bundles is critical for longâ€range kinesinâ€1 motility. Cytoskeleton, 2014, 71, 595-610.	2.0	22
40	Modeling the effects of lattice defects on microtubule breaking and healing. Cytoskeleton, 2017, 74, 3-17.	2.0	20
41	Dynamics of microtubules: highlights of recent computational and experimental investigations. Journal of Physics Condensed Matter, 2017, 29, 433003.	1.8	18
42	The impacts of molecular motor traffic jams. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 5911-5912.	7.1	17
43	Direct Observation of Liquid Crystal Droplet Configurational Transitions using Optical Tweezers. Langmuir, 2020, 36, 7074-7082.	3.5	17
44	Counterion crossbridges enable robust multiscale elasticity in actin networks. Physical Review Research, 2019, 1, .	3.6	17
45	Non-monotonic dependence of stiffness on actin crosslinking in cytoskeleton composites. Soft Matter, 2019, 15, 9056-9065.	2.7	15
46	Actin and microtubule crosslinkers tune mobility and control co-localization in a composite cytoskeletal network. Soft Matter, 2020, 16, 7191-7201.	2.7	15
47	Katanin catalyzes microtubule depolymerization independently of tubulin Câ€terminal tails. Cytoskeleton, 2019, 76, 254-268.	2.0	14
48	Triggered disassembly and reassembly of actin networks induces rigidity phase transitions. Soft Matter, 2019, 15, 1335-1344.	2.7	13
49	Nonequilibrium fluctuations and nonlinear response of an active bath. Physical Review Research, 2022, 4, .	3.6	12
50	Purification and Biophysical Analysis of Microtubule-Severing Enzymes In Vitro. Methods in Cell Biology, 2013, 115, 191-213.	1.1	11
51	Modern methods to interrogate microtubule dynamics. Integrative Biology (United Kingdom), 2013, 5, 1324.	1.3	10
52	Crowder and surface effects on self-organization of microtubules. Physical Review E, 2021, 103, 062408.	2.1	10
53	Active cytoskeletal composites display emergent tunable contractility and restructuring. Soft Matter, 2021, 17, 10765-10776.	2.7	10
54	Microtubules, MAPs, and motor patterns. Methods in Cell Biology, 2015, 128, 23-38.	1.1	4

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55	Autonomous materials from biomimicry. MRS Bulletin, 2019, 44, 119-123.	3.5	4
56	Creation and testing of a new, local microtubuleâ€disruption tool based on the microtubuleâ€severing enzyme, katanin p60. Cytoskeleton, 2018, 75, 531-544.	2.0	2
57	Controlling Liquid Crystal Configuration and Phase Using Multiple Molecular Triggers. Molecules, 2022, 27, 878.	3.8	2
58	A model system to study transport of self-assembled cargos. Communicative and Integrative Biology, 2013, 6, e25387.	1.4	1
59	Cover Image, Volume 75, Issue 12. Cytoskeleton, 2018, 75, C4.	2.0	0
60	Sustained orderâ€"disorder transitions in a model colloidal system driven by rhythmic crosslinking. Soft Matter, 2022, , .	2.7	0