Thomas Surrey

List of Publications by Year
in descending order

83 papers	6,876 citations	50276 46 h-index	69250 77 g-index
98 all docs	98 docs citations	98 times ranked	6004 citing authors

#	Article	IF	Citations
1	Structural transitions in the GTP cap visualized by cryo-electron microscopy of catalytically inactive microtubules. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	28
2	Real-Time Imaging of Single Î³TuRC-Mediated Microtubule Nucleation Events In Vitro by TIRF Microscopy. Methods in Molecular Biology, 2022, 2430, 315-336.	0.9	9
3	Gradual compaction of the central spindle decreases its dynamicity in PRC1 and EB1 gene-edited cells. Life Science Alliance, 2021, 4, e202101222.	2.8	10
4	Microtubule Nucleation Properties of Single Human Î³TuRCs Explained by Their Cryo-EM Structure. Developmental Cell, 2020, 53, 603-617.e8.	7.0	99
5	The speed of GTP hydrolysis determines GTP cap size and controls microtubule stability. ELife, 2020, 9, .	6.0	77
6	Selection and Characterization of Artificial Proteins Targeting the Tubulin Î± Subunit. Structure, 2019, 27, 497-506.e4.	3.3	16
7	Self-Organization of Minimal Anaphase Spindle Midzone Bundles. Current Biology, 2019, 29, 2120-2130.e7.	3.9	43
8	Effects of spatial dimensionality and steric interactions on microtubule-motor self-organization. Physical Biology, 2019, 16, 046004.	1.8	16
9	Spherical network contraction forms microtubule asters in confinement. Soft Matter, 2018, 14, 901-909.	2.7	29
10	Dynein and dynactin at microtubule plus ends. , 2018, , 556-567.		0
11	Determinants of Polar versus Nematic Organization in Networks of Dynamic Microtubules and Mitotic Motors. Cell, 2018, 175, 796-808.e14.	28.9	92
12	Purification and characterisation of the fission yeast Ndc80 complex. Protein Expression and Purification, 2017, 135, 61-69.	1.3	5
13	Steady-state EB cap size fluctuations are determined by stochastic microtubule growth and maturation. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 3427-3432.	7.1	25
14	Combinatorial regulation of the balance between dynein microtubule end accumulation and initiation of directed motility. EMBO Journal, 2017, 36, 3387-3404.	7.8	61
15	Microtubule nucleation: beyond the template. Nature Reviews Molecular Cell Biology, 2017, 18, 702-710.	37.0	148
16	Ensembles of Bidirectional Kinesin Cin8 Produce Additive Forces in Both Directions of Movement. Biophysical Journal, 2017, 113, 2055-2067.	0.5	25
17	Structural insight into TPX2-stimulated microtubule assembly. ELife, 2017, 6, .	6.0	87
18	Mutations in Human Tubulin Proximal to the Kinesin-Binding Site Alter Dynamic Instability at Microtubule Plus- and Minus-Ends. Developmental Cell, 2016, 37, 72-84.	7.0	94

#	Article	IF	Citations
19	Important factors determining the nanoscale tracking precision of dynamic microtubule ends. Journal of Microscopy, 2016, 261, 67-78.	1.8	18
20	Microtubule aging probed by microfluidics-assisted tubulin washout. Molecular Biology of the Cell, 2016, 27, 3563-3573.	2.1	36
21	An unconventional interaction between Dis1/TOG and Mal3/EB1 promotes the fidelity of chromosome segregation. Journal of Cell Science, 2016, 129, 4592-4606.	2.0	33
22	The size of the EB cap determines instantaneous microtubule stability. ELife, 2016, 5, .	6.0	112
23	Key Factors for Stable Retention of Fluorophores and Labeled Biomolecules in Droplet-Based Microfluidics. Analytical Chemistry, 2015, 87, 2063-2067.	6.5	30
24	Regulation of processive motion and microtubule localization of cytoplasmic dynein. Biochemical Society Transactions, 2015, 43, 48-57.	3.4	19
25	Self-organization of motors and microtubules in lipid-monolayered droplets. Methods in Cell Biology, 2015, 128, 39-55.	1.1	2
26	Complementary activities of TPX2 and chTOG constitute an efficient importin-regulated microtubuleÂnucleation module. Nature Cell Biology, 2015, 17, 1422-1434.	10.3	152
27	Seeded Microtubule Growth for Cryoelectron Microscopy of End-Binding Proteins. Methods in Molecular Biology, 2014, 1136, 247-260.	0.9	3
28	Motor-mediated Cortical versus Astral Microtubule Organization in Lipid-monolayered Droplets. Journal of Biological Chemistry, 2014, 289, 22524-22535.	3.4	27
29	Micropattern-Guided Assembly of Overlapping Pairs of Dynamic Microtubules. Methods in Enzymology, 2014, 540, 339-360.	1.0	8
30	Reconstitution of a hierarchical +TIP interaction network controlling microtubule end tracking of dynein. Nature Cell Biology, 2014, 16, 804-811.	10.3	100
31	EB1 Accelerates Two Conformational Transitions Important for Microtubule Maturation and Dynamics. Current Biology, 2014, 24, 372-384.	3.9	187
32	The multiple talents of kinesin-8. Nature Cell Biology, 2013, 15, 889-891.	10.3	8
33	A single Drosophila embryo extract for the study of mitosis ex vivo. Nature Protocols, 2013, 8, 310-324.	12.0	16
34	Microtubule organization in vitro. Current Opinion in Cell Biology, 2013, 25, 23-29.	5.4	69
35	End-binding proteins and Ase1/PRC1 define local functionality of structurally distinct parts of the microtubule cytoskeleton. Trends in Cell Biology, 2013, 23, 54-63.	7.9	42
36	Micropattern-Controlled Local Microtubule Nucleation, Transport, and Mesoscale Organization. ACS Chemical Biology, 2013, 8, 673-678.	3.4	21

#	Article	IF	Citations
37	A designed ankyrin repeat protein selected to bind to tubulin caps the microtubule plus end. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 12011-12016.	7.1	133
38	Aster migration determines the length scale of nuclear separation in the <i>Drosophila</i> syncytial embryo. Journal of Cell Biology, 2012, 197, 887-895.	5.2	88
39	Reconstitution of the human cytoplasmic dynein complex. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 20895-20900.	7.1	111
40	LIS1 Clamps Dynein to the Microtubule. Cell, 2012, 150, 877-879.	28.9	6
41	EBs Recognize a Nucleotide-Dependent Structural Cap at Growing Microtubule Ends. Cell, 2012, 149, 371-382.	28.9	346
42	Phototriggerable 2â€²,7-Caged Paclitaxel. PLoS ONE, 2012, 7, e43657.	2.5	13
43	Reconstitution and Quantification of Dynamic Microtubule End Tracking In Vitro Using TIRF Microscopy. Methods in Molecular Biology, 2011, 777, 127-145.	0.9	24
44	Directional Switching of the Kinesin Cin8 Through Motor Coupling. Science, 2011, 332, 94-99.	12.6	163
45	GTPÎ³S microtubules mimic the growing microtubule end structure recognized by end-binding proteins (EBs). Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 3988-3993.	7.1	196
46	Microtubule Motility on Reconstituted Meiotic Chromatin. Current Biology, 2010, 20, 763-769.	3.9	60
47	Fluorescence Microscopy Assays on Chemically Functionalized Surfaces for Quantitative Imaging of Microtubule, Motor, and +TIP Dynamics. Methods in Cell Biology, 2010, 95, 555-580.	1.1	108
48	Microtubule organization by the antagonistic mitotic motors kinesin-5 and kinesin-14. Journal of Cell Biology, 2010, 189, 465-480.	5.2	143
49	A Minimal Midzone Protein Module Controls Formation and Length of Antiparallel Microtubule Overlaps. Cell, 2010, 142, 420-432.	28.9	282
50	A Novel Approach to Indoloditerpenes by Nazarov Photocyclization: Synthesis and Biological Investigations of Terpendole E Analogues. Organic Letters, 2010, 12, 2096-2099.	4.6	58
51	MOTOR PROTEIN DRIVEN MICROTUBULE TRANSPORT ON GOLD PARTICLE NANOPATTERNS. Biophysical Reviews and Letters, 2009, 04, 153-162.	0.8	0
52	Motile microtubule crosslinkers require distinct dynamic properties for correct functioning during spindle organization in<i>Xenopus</i>egg extract. Journal of Cell Science, 2009, 122, 1295-1300.	2.0	21
53	Organization of Motor Proteins into Functional Micropatterns Fabricated by a Photoinduced Fenton Reaction. Angewandte Chemie - International Edition, 2009, 48, 9188-9191.	13.8	30
54	Obstacles on the Microtubule Reduce the Processivity of Kinesin-1 in a Minimal In Vitro System and in Cell Extract. Biophysical Journal, 2009, 96, 3341-3353.	0.5	114

#	Article	IF	Citations
55	Processive kinesins require loose mechanical coupling for efficient collective motility. EMBO Reports, 2008, 9, 1121-1127.	4.5	105
56	Phosphorylation Relieves Autoinhibition of the Kinetochore Motor Cenp-E. Molecular Cell, 2008, 29, 637-643.	9.7	98
57	Drosophila Ensconsin Promotes Productive Recruitment of Kinesin-1 to Microtubules. Developmental Cell, 2008, 15, 866-876.	7.0	91
58	Llama-Derived Single-Chain Antibody Fragments Directed to Rotavirus VP6 Protein Possess Broad Neutralizing Activity In Vitro and Confer Protection against Diarrhea in Mice. Journal of Virology, 2008, 82, 9753-9764.	3.4	97
59	Poleward transport of Eg5 by dyneinâ€"dynactin in <i>Xenopus laevis</i> egg extract spindles. Journal of Cell Biology, 2008, 182, 715-726.	5.2	85
60	CLIP-170 tracks growing microtubule ends by dynamically recognizing composite EB1/tubulin-binding sites. Journal of Cell Biology, 2008, 183, 1223-1233.	5.2	269
61	A theoretical model of mitotic spindle elongation under experimental constraints. Molecular Systems Biology, 2008, 4, 194.	7.2	0
62	Phosphorylation by Cdk1 Increases the Binding of Eg5 to Microtubules In Vitro and in Xenopus Egg Extract Spindles. PLoS ONE, 2008, 3, e3936.	2.5	81
63	Selection of Genetically Encoded Fluorescent Single Domain Antibodies Engineered for Efficient Expression in Escherichia coli. Journal of Biological Chemistry, 2007, 282, 36314-36320.	3.4	72
64	Protein repellent properties of covalently attached PEG coatings on nanostructured SiO2-based interfaces. Biomaterials, 2007, 28, 4739-4747.	11.4	199
65	Reconstitution of a microtubule plus-end tracking system in vitro. Nature, 2007, 450, 1100-1105.	27.8	457
66	Modelling microtubule patterns. Nature Cell Biology, 2006, 8, 1204-1211.	10.3	88
67	Processive movement of single kinesins on crowded microtubules visualized using quantum dots. EMBO Journal, 2006, 25, 267-277.	7.8	134
68	Thermal fluctuations of grafted microtubules provide evidence of a length-dependent persistence length. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 10248-10253.	7.1	316
69	Motor protein KIFC5A interacts with Nubp1 and Nubp2, and is implicated in the regulation of centrosome duplication. Journal of Cell Science, 2006, 119, 2035-2047.	2.0	37
70	Synthesis and biological evaluation of new tetrahydro-Î²-carbolines as inhibitors of the mitotic kinesin Eg5. Bioorganic and Medicinal Chemistry, 2005, 13, 6094-6111.	3.0	88
71	Development and Biological Evaluation of Potent and Specific Inhibitors of Mitotic Kinesin Eg5. ChemBioChem, 2005, 6, 1173-1177.	2.6	139
72	Microtubule Gliding and Cross-Linked Microtubule Networks on Micropillar Interfaces. Nano Letters, 2005, 5, 2630-2634.	9.1	50

#	Article	IF	Citations
73	The parkinsonism producing neurotoxin MPP+affects microtubule dynamics by acting as a destabilising factor. FEBS Letters, 2005, 579, 4781-4786.	2.8	68
74	A Kinesin-like Motor Inhibits Microtubule Dynamic Instability. Science, 2004, 303, 1519-1522.	12.6	138
75	Nucleotide-induced conformations in the neck region of dimeric kinesin. EMBO Journal, 2003, 22, 1518-1528.	7.8	66
76	Self-organisation and forces in the microtubule cytoskeleton. Current Opinion in Cell Biology, 2003, 15, 118-124.	5.4	122
77	Dynamics of microtubule aster formation by motor complexes. Comptes Rendus Physique, 2001, 2, 841-847.	0.1	8
78	Dynamic Concentration of Motors in Microtubule Arrays. Physical Review Letters, 2001, 86, 3192-3195.	7.8	101
79	Enhanced internal dynamics of a membrane transport protein during substrate translocation. Protein Science, 2000, 9, 2246-2250.	7.6	6
80	Effects of ligand binding on the internal dynamics of maltose-binding protein. FEBS Journal, 1999, 266, 477-483.	0.2	19
81	Folding and Membrane Insertion of the Trimeric Î²-Barrel Protein OmpF. Biochemistry, 1996, 35, 2283-2288.	2.5	134
82	A long lifetime component in the tryptophan fluorescence of some proteins. European Biophysics Journal, 1995, 23, 423-32.	2.2	29
83	Kinetics of Folding and Membrane Insertion of a Î²-Barrel Membrane Protein. Journal of Biological Chemistry, 1995, 270, 28199-28203.	3.4	113