Tarun M Kapoor

List of Publications by Year
in descending order

94 papers	9,231 citations	71102 41 h-index	74163 75 g-index
134 all docs	134 docs citations	134 times ranked	9941 citing authors

#	Article	IF	Citations
1	Small Molecule Inhibitor of Mitotic Spindle Bipolarity Identified in a Phenotype-Based Screen. Science, 1999, 286, 971-974.	12.6	1,638
2	Probing Spindle Assembly Mechanisms with Monastrol, a Small Molecule Inhibitor of the Mitotic Kinesin, Eg5. Journal of Cell Biology, 2000, 150, 975-988.	5.2	633
3	The bipolar mitotic kinesin Eg5 moves on both microtubules that it crosslinks. Nature, 2005, 435, 114-118.	27.8	607
4	Chromosomes Can Congress to the Metaphase Plate Before Biorientation. Science, 2006, 311, 388-391.	12.6	405
5	Structural Basis for Helicase-Polymerase Coupling in the SARS-CoV-2 Replication-Transcription Complex. Cell, 2020, 182, 1560-1573.e13.	28.9	360
6	Small-molecule inhibitors of the AAA+ ATPase motor cytoplasmic dynein. Nature, 2012, 484, 125-129.	27.8	342
7	Midzone activation of aurora B in anaphase produces an intracellular phosphorylation gradient. Nature, 2008, 453, 1132-1136.	27.8	330
8	Insights into Antiparallel Microtubule Crosslinking by PRC1, a Conserved Nonmotor Microtubule Binding Protein. Cell, 2010, 142, 433-443.	28.9	281
9	The kinesin-4 protein Kif7 regulates mammalian Hedgehog signalling by organizing the cilium tip compartment. Nature Cell Biology, 2014, 16, 663-672.	10.3	258
10	Formation of stable attachments between kinetochores and microtubules depends on the B56-PP2A phosphatase. Nature Cell Biology, 2011, 13, 1265-1271.	10.3	239
11	Eg5 is static in bipolar spindles relative to tubulin. Journal of Cell Biology, 2001, 154, 1125-1134.	5.2	156
12	Mitotic Kinesin Inhibitors Induce Mitotic Arrest and Cell Death in Taxol-resistant and -sensitive Cancer Cells. Journal of Biological Chemistry, 2005, 280, 11569-11577.	3.4	149
13	Using transcriptome sequencing to identify mechanisms of drug action and resistance. Nature Chemical Biology, 2012, 8, 235-237.	8.0	148
14	Marking and Measuring Single Microtubules by PRC1 and Kinesin-4. Cell, 2013, 154, 377-390.	28.9	146
15	Centrosome repositioning in T cells is biphasic and driven by microtubule end-on capture-shrinkage. Journal of Cell Biology, 2013, 202, 779-792.	5.2	145
16	Microtubule cross-linking triggers the directional motility of kinesin-5. Journal of Cell Biology, 2008, 182, 421-428.	5.2	138
17	HR22C16: A Potent Small-Molecule Probe for the Dynamics of Cell Division. Angewandte Chemie - International Edition, 2003, 42, 2379-2382.	13.8	136
18	Measuring Pushing and Braking Forces Generated by Ensembles of Kinesin-5 Crosslinking Two Microtubules. Developmental Cell, 2015, 34, 669-681.	7.0	136

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19	Quantitative Chemical Proteomics Approach To Identify Post-translational Modification-Mediated Proteinâ€"Protein Interactions. Journal of the American Chemical Society, 2012, 134, 1982-1985.	13.7	114
20	The mechanics of microtubule networks in cell division. Journal of Cell Biology, 2017, 216, 1525-1531.	5.2	112
21	Asymmetric Molecular Architecture of the Human Î³-Tubulin Ring Complex. Cell, 2020, 180, 165-175.e16.	28.9	111
22	DrugTargetSeqR: a genomics- and CRISPR-Cas9â€"based method to analyze drug targets. Nature Chemical Biology, 2014, 10, 626-628.	8.0	110
23	Probing cell-division phenotype space and Polo-like kinase function using small molecules. , 2006, 2, 618-626.		107
24	Insights into the Micromechanical Properties of the Metaphase Spindle. Cell, 2011, 145, 1062-1074.	28.9	105
25	Allosteric inhibition of kinesin-5 modulates its processive directional motility. Nature Chemical Biology, 2006, 2, 480-485.	8.0	103
26	Human Î²-Tubulin Isotypes Can Regulate Microtubule Protofilament Number and Stability. Developmental Cell, 2018, 47, 175-190.e5.	7.0	100
27	Architectural dynamics of the meiotic spindle revealed by single-fluorophore imaging. Nature Cell Biology, 2007, 9, 1233-1242.	10.3	98
28	A Nonmotor Microtubule Binding Site in Kinesin-5 Is Required for Filament Crosslinking and Sliding. Current Biology, 2011, 21, 154-160.	3.9	97
29	Chemical proteomics reveals a Î³H2AX-53BP1 interaction in the DNA damage response. Nature Chemical Biology, 2015, 11, 807-814.	8.0	96
30	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
31	Searching for the middle ground. Journal of Cell Biology, 2002, 157, 551-556.	5.2	88
32	Diacylglycerol promotes centrosome polarization in T cells via reciprocal localization of dynein and myosin II. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 11976-11981.	7.1	86
33	The structured core of human Î² tubulin confers isotype-specific polymerization properties. Journal of Cell Biology, 2016, 213, 425-433.	5.2	84
34	Building Complexity: Insights into Self-Organized Assembly of Microtubule-Based Architectures. Developmental Cell, 2012, 23, 874-885.	7.0	77
35	Asymmetric Friction of Nonmotor MAPs Can Lead to Their Directional Motion in Active Microtubule Networks. Cell, 2014, 157, 420-432.	28.9	75
36	Near-atomic cryo-EM structure of PRC1 bound to the microtubule. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 9430-9439.	7.1	70

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37	Probing the mechanical architecture of the vertebrate meiotic spindle. Nature Methods, 2009, 6, 167-172.	19.0	69
38	Reconstitution of the augmin complex provides insights into its architecture and function. Nature Cell Biology, 2014, 16, 852-863.	10.3	69
39	A Chemical Proteomics Approach to Reveal Direct Protein-Protein Interactions in Living Cells. Cell Chemical Biology, 2018, 25, 110-120.e3.	5.2	62
40	High-resolution imaging reveals how the spindle midzone impacts chromosome movement. Journal of Cell Biology, 2019, 218, 2529-2544.	5.2	55
41	Potent, Reversible, and Specific Chemical Inhibitors of Eukaryotic Ribosome Biogenesis. Cell, 2016, 167, 512-524.e14.	28.9	51
42	Approach to Profile Proteins That Recognize Post-Translationally Modified Histone â€œTailsâ€. Journal of the American Chemical Society, 2010, 132, 2504-2505.	13.7	46
43	Unraveling cell division mechanisms with small-molecule inhibitors. Nature Chemical Biology, 2006, 2, 19-27.	8.0	45
44	Structural Insights into Mdn1, an Essential AAA Protein Required for Ribosome Biogenesis. Cell, 2018, 175, 822-834.e18.	28.9	42
45	MZT Proteins Form Multi-Faceted Structural Modules in the Î³-Tubulin Ring Complex. Cell Reports, 2020, 31, 107791.	6.4	42
46	Chemical strategies to overcome resistance against targeted anticancer therapeutics. Nature Chemical Biology, 2020, 16, 817-825.	8.0	41
47	Metaphase Spindle Assembly. Biology, 2017, 6, 8.	2.8	40
48	A Myosinâ€…V Inhibitor Based on Privileged Chemical Scaffolds. Angewandte Chemie - International Edition, 2010, 49, 8484-8488.	13.8	39
49	Force-dependent stimulation of RNA unwinding by SARS-CoV-2Ânsp13 helicase. Biophysical Journal, 2021, 120, 1020-1030.	0.5	39
50	Analyzing Fission Yeast Multidrug Resistance Mechanisms to Develop a Genetically Tractable Model System for Chemical Biology. Chemistry and Biology, 2012, 19, 893-901.	6.0	36
51	Examining postâ€translational modificationâ€mediated proteinâ€“protein interactions using a chemical proteomics approach. Protein Science, 2013, 22, 287-295.	7.6	33
52	Designing a chemical inhibitor for the AAA protein spastin using active site mutations. Nature Chemical Biology, 2019, 15, 444-452.	8.0	31
53	Chemical structure-guided design of dynapyrazoles, cell-permeable dynein inhibitors with a unique mode of action. ELife, 2017, 6, .	6.0	31
54	Leveraging Chemotype-Specific Resistance for Drug Target Identification and Chemical Biology. Trends in Pharmacological Sciences, 2017, 38, 1100-1109.	8.7	30

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55	HR22C16: A Potent Small-Molecule Probe for the Dynamics of Cell Division. Angewandte Chemie, 2003, 115, 2481-2484.	2.0	27
56	Non-centrosomal microtubules at kinetochores promote rapid chromosome biorientation during mitosis in human cells. Current Biology, 2022, 32, 1049-1063.e4.	3.9	24
57	Dissecting the first and the second meiotic divisions using a marker-less drug-hypersensitive fission yeast. Cell Cycle, 2014, 13, 1327-1334.	2.6	23
58	Biochemical reconstitutions reveal principles of human Î³-TuRC assembly and function. Journal of Cell Biology, 2021, 220, .	5.2	23
59	Micromechanics of the Vertebrate Meiotic Spindle Examined by Stretching along the Pole-to-Pole Axis. Biophysical Journal, 2014, 106, 735-740.	0.5	22
60	Cytoplasmic Dynein Antagonists with Improved Potency and Isoform Selectivity. ACS Chemical Biology, 2016, 11, 53-60.	3.4	19
61	Microtubules Enhance Mesoscale Effective Diffusivity in the Crowded Metaphase Cytoplasm. Developmental Cell, 2020, 54, 574-582.e4.	7.0	18
62	A Chemical Biology Strategy to Analyze Rheostat-like Protein Kinase-Dependent Regulation. Chemistry and Biology, 2013, 20, 262-271.	6.0	16
63	Analyzing Resistance to Design Selective Chemical Inhibitors for AAA Proteins. Cell Chemical Biology, 2019, 26, 1263-1273.e5.	5.2	16
64	Designing Allele-Specific Inhibitors of Spastin, a Microtubule-Severing AAA Protein. Journal of the American Chemical Society, 2019, 141, 5602-5606.	13.7	16
65	Using â€˜biased-privilegedâ€™ scaffolds to identify lysine methyltransferase inhibitors. Bioorganic and Medicinal Chemistry, 2014, 22, 2253-2260.	3.0	13
66	Site-Specific Chemistry on the Microtubule Polymer. Journal of the American Chemical Society, 2013, 135, 12520-12523.	13.7	11
67	Purification of Affinity Tag-free Recombinant Tubulin from Insect Cells. STAR Protocols, 2020, 1, 100011.	1.2	11
68	Using chemical inhibitors to probe AAA protein conformational dynamics and cellular functions. Current Opinion in Chemical Biology, 2019, 50, 45-54.	6.1	8
69	Chromosome Segregation: Correcting Improper Attachment. Current Biology, 2004, 14, R1011-R1013.	3.9	7
70	Diversity-oriented Synthesis. , 0, , 483-518.		7
71	Controlling Proteinâ€"Protein Interactions Using Chemical Inducers and Disrupters of Dimerization. , 0, , 227-249.		7
72	Long-range intramolecular allostery and regulation in the dynein-like AAA protein Mdn1. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 18459-18469.	7.1	6

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73	Distinct Mechanisms of Resistance to a CENP-E Inhibitor Emerge in Near-Haploid and Diploid Cancer Cells. Cell Chemical Biology, 2020, 27, 850-857.e6.	5.2	6
74	A chemical genetics approach to examine the functions of AAA proteins. Nature Structural and Molecular Biology, 2021, 28, 388-397.	8.2	4
75	Chemical probes for dynein. , 2018, , 172-191.		3
76	Using Natural Products to Unravel Cell Biology. , 0, , 95-114.		3
77	Targeting allostery in the Dynein motor domain with small molecule inhibitors. Cell Chemical Biology, 2021, 28, 1460-1473.e15.	5.2	2
78	A wrench in the motor. Nature Chemical Biology, 2021, , .	8.0	2
79	Drugs Targeting Proteinâ€"Protein Interactions. , 0, , 979-1002.		2
80	Chemical Strategies for Activity-based Proteomics. , 0, , 403-426.		1
81	Analyzing the micromechanics of the cell division apparatus. Methods in Cell Biology, 2018, 145, 173-190.	1.1	1
82	The Biarsenical-tetracysteine Protein Tag: Chemistry and Biological Applications. , 0, , 427-457.		1
83	Chemical Approaches to Exploit Fusion Proteins for Functional Studies. , 0, , 458-479.		1
84	Managerial Challenges in Implementing Chemical Biology Platforms. , 0, , 789-803.		1
85	Reverse Chemical Geneticsâ€" An Important Strategy for the Study of Protein Function in Chemical Biology and Drug Discovery. , 0, , 355-384.		1
86	Chemical Biology of Kinases Studied by NMR Spectroscopy. , 0, , 852-890.		1
87	Chemical Complementation: Bringing the Power of Genetics to Chemistry. , 0, , 199-226.		0
88	2P-224 Examining the mechanical features of the vertebrate meiotic spindle(The 46th Annual Meeting) Tj ETQq0 0 0 rgBT /Overlock 10	0.1	0
89	1P-199 Probing dynamic shape regulation of the meiotic spindle(The 46th Annual Meeting of the) Tj ETQq1 1 0.784314 rgBT /Overlock	0.1	0
90	1P218 1C1325 Regulatory mechanism of the shape and size of the vertebrate meiotic spindle(Cell) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 Butsuri, 2010, 50, S57-S58.	0.1	0

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91	An Optical Switch for a Motor Protein. ChemBioChem, 2011, 12, 2265-2266.	2.6	0
92	Analyzing Distinct Binding Modes of Diaminotriazole-Based Spastin Inhibitors Through Biochemical Resistance. SSRN Electronic Journal, 0, , .	0.4	0
93	Chemical Biologyâ€" An Outlook. , 0, , 1143-1150.		0
94	Chemical Biology and Enzymology: Protein Phosphorylation as a Case Study. , 0, , 385-402.		0