Carsten Janke

List of Publications by Year
in descending order

92	10,889	50276	39675
papers	citations	46 h-index	94 g-index

101	101	101	10861
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A versatile toolbox for PCR-based tagging of yeast genes: new fluorescent proteins, more markers and promoter substitution cassettes. Yeast, 2004, 21, 947-962.	1.7	1,837
2	Post-translational regulation of the microtubule cytoskeleton: mechanisms and functions. Nature Reviews Molecular Cell Biology, 2011, 12, 773-786.	37.0	708
3	Evidence that the Ipl1-Sli15 (Aurora Kinase-INCENP) Complex Promotes Chromosome Bi-orientation by Altering Kinetochore-Spindle Pole Connections. Cell, 2002, 108, 317-329.	28.9	663
4	The tubulin code and its role in controlling microtubule properties and functions. Nature Reviews Molecular Cell Biology, 2020, 21, 307-326.	37.0	462
5	The tubulin code: Molecular components, readout mechanisms, and functions. Journal of Cell Biology, 2014, 206, 461-472.	5.2	427
6	Tubulin post-translational modifications: encoding functions on the neuronal microtubule cytoskeleton. Trends in Neurosciences, 2010, 33, 362-372.	8.6	298
7	Tubulin Polyglutamylase Enzymes Are Members of the TTL Domain Protein Family. Science, 2005, 308, 1758-1762.	12.6	289
8	A Family of Protein-Deglutamylating Enzymes Associated with Neurodegeneration. Cell, 2010, 143, 564-578.	28.9	287
9	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
10	Tubulin polyglutamylation stimulates spastin-mediated microtubule severing. Journal of Cell Biology, 2010, 189, 945-954.	5.2	244
11	A Targeted Multienzyme Mechanism for Selective Microtubule Polyglutamylation. Molecular Cell, 2007, 26, 437-448.	9.7	232
12	Causes and Consequences of Microtubule Acetylation. Current Biology, 2017, 27, R1287-R1292.	3.9	220
13	Loss of Â-tubulin polyglutamylation in ROSA22 mice is associated with abnormal targeting of KIF1A and modulated synaptic function. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 3213-3218.	7.1	202
14	Microtubule detyrosination guides chromosomes during mitosis. Science, 2015, 348, 799-803.	12.6	202
15	Microtubule-Associated Proteins: Structuring the Cytoskeleton. Trends in Cell Biology, 2019, 29, 804-819.	7.9	201
16	The tubulin code at a glance. Journal of Cell Science, 2017, 130, 1347-1353.	2.0	194
17	Structural basis of tubulin tyrosination by tubulin tyrosine ligase. Journal of Cell Biology, 2013, 200, 259-270.	5.2	189
18	Spindle asymmetry drives non-Mendelian chromosome segregation. Science, 2017, 358, 668-672.	12.6	179

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19	The budding yeast proteins Spc24p and Spc25p interact with Ndc80p and Nuf2p at the kinetochore and are important for kinetochore clustering and checkpoint control. EMBO Journal, 2001, 20, 777-791.	7.8	167
20	Î±-Tubulin Tyrosination and CLIP-170 Phosphorylation Regulate the Initiation of Dynein-Driven Transport in Neurons. Cell Reports, 2016, 14, 2637-2652.	6.4	154
21	Four new subunits of the Dam1-Duo1 complex reveal novel functions in sister kinetochore biorientation. EMBO Journal, 2002, 21, 181-193.	7.8	151
22	Evolutionary Divergence of Enzymatic Mechanisms for Posttranslational Polyglycylation. Cell, 2009, 137, 1076-1087.	28.9	137
23	TTLL3 Is a Tubulin Glycine Ligase that Regulates the Assembly of Cilia. Developmental Cell, 2009, 16, 867-876.	7.0	136
24	Tubulin Posttranslational Modifications and Emerging Links to Human Disease. Cell, 2018, 173, 1323-1327.	28.9	132
25	Kinesin-3 Responds to Local Microtubule Dynamics to Target Synaptic Cargo Delivery to the Presynapse. Current Biology, 2019, 29, 268-282.e8.	3.9	127
26	The emerging role of the tubulin code: From the tubulin molecule to neuronal function and disease. Cytoskeleton, 2016, 73, 521-550.	2.0	116
27	Synaptic activation modifies microtubules underlying transport of postsynaptic cargo. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 8731-8736.	7.1	112
28	Excessive tubulin polyglutamylation causes neurodegeneration and perturbs neuronal transport. EMBO Journal, 2018, 37, .	7.8	110
29	Polyglutamylation: a fineâ€regulator of protein function?. EMBO Reports, 2008, 9, 636-641.	4.5	93
30	Phylogenetic diversity of the expression of the microtubule-associated protein tau: implications for neurodegenerative disorders. Molecular Brain Research, 1999, 68, 119-128.	2.3	90
31	Polyglutamylation Is a Post-translational Modification with a Broad Range of Substrates. Journal of Biological Chemistry, 2008, 283, 3915-3922.	3.4	89
32	Glutamylation on Î±-Tubulin Is Not Essential but Affects the Assembly and Functions of a Subset of Microtubules in Tetrahymena thermophila. Eukaryotic Cell, 2008, 7, 1362-1372.	3.4	89
33	Post-translational modifications of tubulin. Current Biology, 2014, 24, R351-R354.	3.9	88
34	Ependymal cell differentiation, from monociliated to multiciliated cells. Methods in Cell Biology, 2015, 127, 19-35.	1.1	88
35	Tubulin glycylases and glutamylases have distinct functions in stabilization and motility of ependymal cilia. Journal of Cell Biology, 2013, 202, 441-451.	5.2	87
36	Loss of tubulin deglutamylase <scp>CCP</scp> 1 causes infantileâ€onset neurodegeneration. EMBO Journal, 2018, 37, .	7.8	86

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37	Tubulin glycylation controls axonemal dynein activity, flagellar beat, and male fertility. Science, 2021, 371, .	12.6	84
38	ATAT1/MEC-17 acetyltransferase and HDAC6 deacetylase control a balance of acetylation of alpha-tubulin and cortactin and regulate MT1-MMP trafficking and breast tumor cell invasion. European Journal of Cell Biology, 2012, 91, 950-960.	3.6	83
39	Tubulin glycylases are required for primary cilia, control of cell proliferation and tumor development in colon. EMBO Journal, 2014, 33, 2247-2260.	7.8	82
40	Microtubules: 50 years on from the discovery of tubulin. Nature Reviews Molecular Cell Biology, 2016, 17, 322-328.	37.0	67
41	Tubulin glycylation controls primary cilia length. Journal of Cell Biology, 2017, 216, 2701-2713.	5.2	67
42	The cytosolic carboxypeptidases CCP2 and CCP3 catalyze posttranslational removal of acidic amino acids. Molecular Biology of the Cell, 2014, 25, 3017-3027.	2.1	62
43	Mutation of the Î±-tubulin Tuba1a leads to straighter microtubules and perturbs neuronal migration. Journal of Cell Biology, 2017, 216, 2443-2461.	5.2	61
44	Postmortem changes in the phosphorylation state of tau-protein in the rat brain. Neurobiology of Aging, 1998, 19, 535-543.	3.1	57
45	Alterations in the balance of tubulin glycylation and glutamylation in photoreceptors leads to retinal degeneration. Journal of Cell Science, 2017, 130, 938-949.	2.0	57
46	Characterisation of PGs1, a subunit of a protein complex co-purifying with tubulin polyglutamylase. Journal of Cell Science, 2003, 116, 4181-4190.	2.0	53
47	Cell-Intrinsic Control of Interneuron Migration Drives Cortical Morphogenesis. Cell, 2018, 172, 1063-1078.e19.	28.9	48
48	Direct induction of microtubule branching by microtubule nucleation factor SSNA1. Nature Cell Biology, 2018, 20, 1172-1180.	10.3	48
49	<scp>TUBB</scp> 1 mutations cause thyroid dysgenesis associated with abnormal platelet physiology. EMBO Molecular Medicine, 2018, 10, .	6.9	47
50	Involvement of the Tubulin Tyrosine Ligase-Like Family Member 4 Polyglutamylase in PELP1 Polyglutamylation and Chromatin Remodeling in Pancreatic Cancer Cells. Cancer Research, 2010, 70, 4024-4033.	0.9	43
51	Evidence for new C-terminally truncated variants of Î±- and Î²-tubulins. Molecular Biology of the Cell, 2016, 27, 640-653.	2.1	43
52	Bug22 influences cilium morphology and the post-translational modification of ciliary microtubules. Biology Open, 2014, 3, 138-151.	1.2	42
53	ATAT1-enriched vesicles promote microtubule acetylation via axonal transport. Science Advances, 2019, 5, eaax2705.	10.3	42
54	Mï¿½ller (glial) cells in the teleost retina: Consequences of continuous growth. Glia, 1998, 22, 306-313.	4.9	40

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55	The use of okadaic acid in vivo and the induction of molecular changes typical for Alzheimer's disease. Neuroscience, 1998, 85, 1337-1340.	2.3	40
56	Distribution of isoforms of the microtubule-associated protein tau in grey and white matter areas of human brain: A two-dimensional gelelectrophoretic analysis. FEBS Letters, 1996, 379, 222-226.	2.8	39
57	Tubulin polyglutamylation is a general traffic control mechanism in hippocampal neurons. Journal of Cell Science, 2020, 133, .	2.0	39
58	Investigating Tubulin Posttranslational Modifications with Specific Antibodies. Methods in Cell Biology, 2013, 115, 247-267.	1.1	37
59	Î±TAT1 controls longitudinal spreading of acetylation marks from open microtubules extremities. Scientific Reports, 2016, 6, 35624.	3.3	35
60	An essential role for Î±4A-tubulin in platelet biogenesis. Life Science Alliance, 2019, 2, e201900309.	2.8	34
61	Activation of mitogen-activated protein kinase cascade and phosphorylation of cytoskeletal proteins after neurone-specific activation of p21ras. II. Cytoskeletal proteins and dendritic morphology. Neuroscience, 2001, 105, 1041-1054.	2.3	31
62	Distinct roles of Î±â€•and Î²â€tubulin polyglutamylation in controlling axonal transport and in neurodegeneration. EMBO Journal, 2021, 40, e108498.	7.8	31
63	Purification of tubulin with controlled post-translational modifications by polymerizationâ€“depolymerization cycles. Nature Protocols, 2019, 14, 1634-1660.	12.0	28
64	Nsl1p is essential for the establishment of bipolarity and the localization of the Dam-Duo complex. EMBO Journal, 2003, 22, 6584-6597.	7.8	27
65	Molecular interactions between tubulin tails and glutamylases reveal determinants of glutamylation patterns. EMBO Reports, 2017, 18, 1013-1026.	4.5	27
66	SnapShot: Functions of Tubulin Posttranslational Modifications. Cell, 2018, 173, 1552-1552.e1.	28.9	25
67	Loss of the deglutamylase CCP5 perturbs multiple steps of spermatogenesis and leads to male infertility. Journal of Cell Science, 2019, 132, .	2.0	25
68	Tubulin polyglutamylation, a regulator of microtubule functions, can cause neurodegeneration. Neuroscience Letters, 2021, 746, 135656.	2.1	24
69	Lysate-based pipeline to characterize microtubule-associated proteins uncovers unique microtubule behaviours. Nature Cell Biology, 2022, 24, 253-267.	10.3	24
70	Towards elucidating the tubulin code. Nature Cell Biology, 2014, 16, 303-305.	10.3	23
71	Cytoskeleton stability is essential for the integrity of the cerebellum and its motor- and affective-related behaviors. Scientific Reports, 2018, 8, 3072.	3.3	23
72	Direct observation of dynamic protein interactions involving human microtubules using solid-state NMR spectroscopy. Nature Communications, 2020, 11, 18.	12.8	20

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73	Genetically encoded live-cell sensor for tyrosinated microtubules. Journal of Cell Biology, 2020, 219, .	5.2	20
74	Reorganization of Synaptic Connections and Perineuronal Nets in the Deep Cerebellar Nuclei ofPurkinje Cell DegenerationMutant Mice. Neural Plasticity, 2016, 2016, 1-17.	2.2	18
75	Characterisation of polyglutamylases in trypanosomatids. International Journal for Parasitology, 2015, 45, 121-132.	3.1	16
76	Analysis of the molecular heterogeneity of the microtubule-associated protein tau by two-dimensional electrophoresis and RT-PCR. Brain Research Protocols, 2000, 5, 231-242.	1.6	15
77	Generation of Differentially Polyglutamylated Microtubules. Methods in Molecular Biology, 2011, 777, 57-69.	0.9	11
78	Molecular dissection of yeast spindle pole bodies by two hybrid, in vitro binding, and co-purification. Methods in Cell Biology, 2001, 67, 71-94.	1.1	10
79	Drosophila DSP1 and Rat HMGB1 Have Equivalent DNA Binding Properties and Share a Similar Secondary Fold. Journal of Biochemistry, 2003, 133, 533-539.	1.7	10
80	Measuring the Impact of Tubulin Posttranslational Modifications on Axonal Transport. Methods in Molecular Biology, 2020, 2101, 353-370.	0.9	9
81	Distinct roles of Î±â€•and Î²â€tubulin polyglutamylation in controlling axonal transport and in neurodegeneration. EMBO Journal, 2022, 41, .	7.8	8
82	Bacterial kinesin light chain (Bklc) links the Btub cytoskeleton to membranes. Scientific Reports, 2017, 7, 45668.	3.3	7
83	The comeback of hand drawing in modern life sciences. Nature Reviews Molecular Cell Biology, 2018, 19, 137-138.	37.0	6
84	Knocking Out Multiple Genes in Cultured Primary Neurons to Study Tubulin Posttranslational Modifications. Methods in Molecular Biology, 2020, 2101, 327-351.	0.9	6
85	The tubulin code in mammalian sperm development and function. Seminars in Cell and Developmental Biology, 2023, 137, 26-37.	5.0	6
86	Optochemistry to control the microtubuleÂcytoskeleton. EMBO Journal, 2015, 34, 2114-2116.	7.8	4
87	Mutations in the most divergent Î±â€tubulin isotype, Î±8â€tubulin, cause defective platelet biogenesis. Journal of Thrombosis and Haemostasis, 2022, 20, 461-469.	3.8	4
88	H-ABCâ€“ and dystonia-causing TUBB4A mutations show distinct pathogenic effects. Science Advances, 2022, 8, eabj9229.	10.3	4
89	Solid-State NMR Spectroscopy for Studying Microtubules and Microtubule-Associated Proteins. Methods in Molecular Biology, 2021, 2305, 193-201.	0.9	3
90	Purification of Tubulin with Controlled Posttranslational Modifications and Isotypes from Limited Sources by Polymerization-Depolymerization Cycles. Journal of Visualized Experiments, 2020, , .	0.3	3

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91	Microtubule and auditory function â€“ an underestimated connection. Seminars in Cell and Developmental Biology, 2023, 137, 74-86.	5.0	3
92	A unified reviewing format for grant applications and evaluations. EMBO Reports, 2018, 19, 187-188.	4.5	2