

# Carsten Janke

## List of Publications by Year in descending order

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92  
papers

10,889  
citations

50170

46  
h-index

39575

94  
g-index

101  
all docs

101  
docs citations

101  
times ranked

10861  
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. <i>Yeast</i> , 2004, 21, 947-962.	0.8	1,837
2	Post-translational regulation of the microtubule cytoskeleton: mechanisms and functions. <i>Nature Reviews Molecular Cell Biology</i> , 2011, 12, 773-786.	16.1	708
3	Evidence that the Ipl1-Sli15 (Aurora Kinase-INCENP) Complex Promotes Chromosome Bi-orientation by Altering Kinetochores-Spindle Pole Connections. <i>Cell</i> , 2002, 108, 317-329.	13.5	663
4	The tubulin code and its role in controlling microtubule properties and functions. <i>Nature Reviews Molecular Cell Biology</i> , 2020, 21, 307-326.	16.1	462
5	The tubulin code: Molecular components, readout mechanisms, and functions. <i>Journal of Cell Biology</i> , 2014, 206, 461-472.	2.3	427
6	Tubulin post-translational modifications: encoding functions on the neuronal microtubule cytoskeleton. <i>Trends in Neurosciences</i> , 2010, 33, 362-372.	4.2	298
7	Tubulin Polyglutamylase Enzymes Are Members of the TTL Domain Protein Family. <i>Science</i> , 2005, 308, 1758-1762.	6.0	289
8	A Family of Protein-Deglutamylating Enzymes Associated with Neurodegeneration. <i>Cell</i> , 2010, 143, 564-578.	13.5	287
9	CLIP-170 tracks growing microtubule ends by dynamically recognizing composite EB1/tubulin-binding sites. <i>Journal of Cell Biology</i> , 2008, 183, 1223-1233.	2.3	269
10	Tubulin polyglutamylation stimulates spastin-mediated microtubule severing. <i>Journal of Cell Biology</i> , 2010, 189, 945-954.	2.3	244
11	A Targeted Multienzyme Mechanism for Selective Microtubule Polyglutamylation. <i>Molecular Cell</i> , 2007, 26, 437-448.	4.5	232
12	Causes and Consequences of Microtubule Acetylation. <i>Current Biology</i> , 2017, 27, R1287-R1292.	1.8	220
13	Loss of $\gamma$ -tubulin polyglutamylation in ROSA22 mice is associated with abnormal targeting of KIF1A and modulated synaptic function. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 3213-3218.	3.3	202
14	Microtubule detyrosination guides chromosomes during mitosis. <i>Science</i> , 2015, 348, 799-803.	6.0	202
15	Microtubule-Associated Proteins: Structuring the Cytoskeleton. <i>Trends in Cell Biology</i> , 2019, 29, 804-819.	3.6	201
16	The tubulin code at a glance. <i>Journal of Cell Science</i> , 2017, 130, 1347-1353.	1.2	194
17	Structural basis of tubulin tyrosination by tubulin tyrosine ligase. <i>Journal of Cell Biology</i> , 2013, 200, 259-270.	2.3	189
18	Spindle asymmetry drives non-Mendelian chromosome segregation. <i>Science</i> , 2017, 358, 668-672.	6.0	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. <i>EMBO Journal</i> , 2001, 20, 777-791.	3.5	167
20	Î±-Tubulin Tyrosination and CLIP-170 Phosphorylation Regulate the Initiation of Dynein-Driven Transport in Neurons. <i>Cell Reports</i> , 2016, 14, 2637-2652.	2.9	154
21	Four new subunits of the Dam1-Duo1 complex reveal novel functions in sister kinetochore biorientation. <i>EMBO Journal</i> , 2002, 21, 181-193.	3.5	151
22	Evolutionary Divergence of Enzymatic Mechanisms for Posttranslational Polyglycylation. <i>Cell</i> , 2009, 137, 1076-1087.	13.5	137
23	TTL3 Is a Tubulin Glycine Ligase that Regulates the Assembly of Cilia. <i>Developmental Cell</i> , 2009, 16, 867-876.	3.1	136
24	Tubulin Posttranslational Modifications and Emerging Links to Human Disease. <i>Cell</i> , 2018, 173, 1323-1327.	13.5	132
25	Kinesin-3 Responds to Local Microtubule Dynamics to Target Synaptic Cargo Delivery to the Presynapse. <i>Current Biology</i> , 2019, 29, 268-282.e8.	1.8	127
26	The emerging role of the tubulin code: From the tubulin molecule to neuronal function and disease. <i>Cytoskeleton</i> , 2016, 73, 521-550.	1.0	116
27	Synaptic activation modifies microtubules underlying transport of postsynaptic cargo. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 8731-8736.	3.3	112
28	Excessive tubulin polyglutamylation causes neurodegeneration and perturbs neuronal transport. <i>EMBO Journal</i> , 2018, 37, .	3.5	110
29	Polyglutamylation: a fine-tune regulator of protein function?. <i>EMBO Reports</i> , 2008, 9, 636-641.	2.0	93
30	Phylogenetic diversity of the expression of the microtubule-associated protein tau: implications for neurodegenerative disorders. <i>Molecular Brain Research</i> , 1999, 68, 119-128.	2.5	90
31	Polyglutamylation Is a Post-translational Modification with a Broad Range of Substrates. <i>Journal of Biological Chemistry</i> , 2008, 283, 3915-3922.	1.6	89
32	Glutamylation on Î±-Tubulin Is Not Essential but Affects the Assembly and Functions of a Subset of Microtubules in <i>Tetrahymena thermophila</i> . <i>Eukaryotic Cell</i> , 2008, 7, 1362-1372.	3.4	89
33	Post-translational modifications of tubulin. <i>Current Biology</i> , 2014, 24, R351-R354.	1.8	88
34	Ependymal cell differentiation, from monociliated to multiciliated cells. <i>Methods in Cell Biology</i> , 2015, 127, 19-35.	0.5	88
35	Tubulin glycyllases and glutamylases have distinct functions in stabilization and motility of ependymal cilia. <i>Journal of Cell Biology</i> , 2013, 202, 441-451.	2.3	87
36	Loss of tubulin deglutamylase <i>CCP1</i> causes infantile-onset neurodegeneration. <i>EMBO Journal</i> , 2018, 37, .	3.5	86

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37	Tubulin glycylation controls axonemal dynein activity, flagellar beat, and male fertility. <i>Science</i> , 2021, 371, .	6.0	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. <i>European Journal of Cell Biology</i> , 2012, 91, 950-960.	1.6	83
39	Tubulin glycylation is required for primary cilia, control of cell proliferation and tumor development in colon. <i>EMBO Journal</i> , 2014, 33, 2247-2260.	3.5	82
40	Microtubules: 50 years on from the discovery of tubulin. <i>Nature Reviews Molecular Cell Biology</i> , 2016, 17, 322-328.	16.1	67
41	Tubulin glycylation controls primary cilia length. <i>Journal of Cell Biology</i> , 2017, 216, 2701-2713.	2.3	67
42	The cytosolic carboxypeptidases CCP2 and CCP3 catalyze posttranslational removal of acidic amino acids. <i>Molecular Biology of the Cell</i> , 2014, 25, 3017-3027.	0.9	62
43	Mutation of the $\beta$ -tubulin Tuba1a leads to straighter microtubules and perturbs neuronal migration. <i>Journal of Cell Biology</i> , 2017, 216, 2443-2461.	2.3	61
44	Postmortem changes in the phosphorylation state of tau-protein in the rat brain. <i>Neurobiology of Aging</i> , 1998, 19, 535-543.	1.5	57
45	Alterations in the balance of tubulin glycylation and glutamylation in photoreceptors leads to retinal degeneration. <i>Journal of Cell Science</i> , 2017, 130, 938-949.	1.2	57
46	Characterisation of PGs1, a subunit of a protein complex co-purifying with tubulin polyglutamylase. <i>Journal of Cell Science</i> , 2003, 116, 4181-4190.	1.2	53
47	Cell-Intrinsic Control of Interneuron Migration Drives Cortical Morphogenesis. <i>Cell</i> , 2018, 172, 1063-1078.e19.	13.5	48
48	Direct induction of microtubule branching by microtubule nucleation factor SSNA1. <i>Nature Cell Biology</i> , 2018, 20, 1172-1180.	4.6	48
49	$\beta$ -TUBB1 mutations cause thyroid dysgenesis associated with abnormal platelet physiology. <i>EMBO Molecular Medicine</i> , 2018, 10, .	3.3	47
50	Involvement of the Tubulin Tyrosine Ligase-Like Family Member 4 Polyglutamylase in PELP1 Polyglutamylation and Chromatin Remodeling in Pancreatic Cancer Cells. <i>Cancer Research</i> , 2010, 70, 4024-4033.	0.4	43
51	Evidence for new C-terminally truncated variants of $\beta$ - and $\beta$ -tubulins. <i>Molecular Biology of the Cell</i> , 2016, 27, 640-653.	0.9	43
52	Bug22 influences cilium morphology and the post-translational modification of ciliary microtubules. <i>Biology Open</i> , 2014, 3, 138-151.	0.6	42
53	ATAT1-enriched vesicles promote microtubule acetylation via axonal transport. <i>Science Advances</i> , 2019, 5, eaax2705.	4.7	42
54	Müller (glial) cells in the teleost retina: Consequences of continuous growth. <i>Glia</i> , 1998, 22, 306-313.	2.5	40

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55	The use of okadaic acid in vivo and the induction of molecular changes typical for Alzheimer's disease. <i>Neuroscience</i> , 1998, 85, 1337-1340.	1.1	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. <i>FEBS Letters</i> , 1996, 379, 222-226.	1.3	39
57	Tubulin polyglutamylation is a general traffic control mechanism in hippocampal neurons. <i>Journal of Cell Science</i> , 2020, 133, .	1.2	39
58	Investigating Tubulin Posttranslational Modifications with Specific Antibodies. <i>Methods in Cell Biology</i> , 2013, 115, 247-267.	0.5	37
59	Î±TAT1 controls longitudinal spreading of acetylation marks from open microtubules extremities. <i>Scientific Reports</i> , 2016, 6, 35624.	1.6	35
60	An essential role for Î±4A-tubulin in platelet biogenesis. <i>Life Science Alliance</i> , 2019, 2, e201900309.	1.3	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. <i>Neuroscience</i> , 2001, 105, 1041-1054.	1.1	31
62	Distinct roles of Î± and Î²-tubulin polyglutamylation in controlling axonal transport and in neurodegeneration. <i>EMBO Journal</i> , 2021, 40, e108498.	3.5	31
63	Purification of tubulin with controlled post-translational modifications by polymerizationâ€“depolymerization cycles. <i>Nature Protocols</i> , 2019, 14, 1634-1660.	5.5	28
64	Nsl1p is essential for the establishment of bipolarity and the localization of the Dam-Duo complex. <i>EMBO Journal</i> , 2003, 22, 6584-6597.	3.5	27
65	Molecular interactions between tubulin tails and glutamylases reveal determinants of glutamylation patterns. <i>EMBO Reports</i> , 2017, 18, 1013-1026.	2.0	27
66	SnapShot: Functions of Tubulin Posttranslational Modifications. <i>Cell</i> , 2018, 173, 1552-1552.e1.	13.5	25
67	Loss of the deglutamylase CCP5 perturbs multiple steps of spermatogenesis and leads to male infertility. <i>Journal of Cell Science</i> , 2019, 132, .	1.2	25
68	Tubulin polyglutamylation, a regulator of microtubule functions, can cause neurodegeneration. <i>Neuroscience Letters</i> , 2021, 746, 135656.	1.0	24
69	Lysate-based pipeline to characterize microtubule-associated proteins uncovers unique microtubule behaviours. <i>Nature Cell Biology</i> , 2022, 24, 253-267.	4.6	24
70	Towards elucidating the tubulin code. <i>Nature Cell Biology</i> , 2014, 16, 303-305.	4.6	23
71	Cytoskeleton stability is essential for the integrity of the cerebellum and its motor- and affective-related behaviors. <i>Scientific Reports</i> , 2018, 8, 3072.	1.6	23
72	Direct observation of dynamic protein interactions involving human microtubules using solid-state NMR spectroscopy. <i>Nature Communications</i> , 2020, 11, 18.	5.8	20

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73	Genetically encoded live-cell sensor for tyrosinated microtubules. <i>Journal of Cell Biology</i> , 2020, 219, .	2.3	20
74	Reorganization of Synaptic Connections and Perineuronal Nets in the Deep Cerebellar Nuclei of <i>Purkinje Cell Degeneration</i> Mutant Mice. <i>Neural Plasticity</i> , 2016, 2016, 1-17.	1.0	18
75	Characterisation of polyglutamylases in trypanosomatids. <i>International Journal for Parasitology</i> , 2015, 45, 121-132.	1.3	16
76	Analysis of the molecular heterogeneity of the microtubule-associated protein tau by two-dimensional electrophoresis and RT-PCR. <i>Brain Research Protocols</i> , 2000, 5, 231-242.	1.7	15
77	Generation of Differentially Polyglutamylated Microtubules. <i>Methods in Molecular Biology</i> , 2011, 777, 57-69.	0.4	11
78	Molecular dissection of yeast spindle pole bodies by two hybrid, in vitro binding, and co-purification. <i>Methods in Cell Biology</i> , 2001, 67, 71-94.	0.5	10
79	<i>Drosophila</i> DSP1 and Rat HMGB1 Have Equivalent DNA Binding Properties and Share a Similar Secondary Fold. <i>Journal of Biochemistry</i> , 2003, 133, 533-539.	0.9	10
80	Measuring the Impact of Tubulin Posttranslational Modifications on Axonal Transport. <i>Methods in Molecular Biology</i> , 2020, 2101, 353-370.	0.4	9
81	Distinct roles of $\beta$ - and $\beta$ -tubulin polyglutamylation in controlling axonal transport and in neurodegeneration. <i>EMBO Journal</i> , 2022, 41, .	3.5	8
82	Bacterial kinesin light chain (Bklc) links the Btub cytoskeleton to membranes. <i>Scientific Reports</i> , 2017, 7, 45668.	1.6	7
83	The comeback of hand drawing in modern life sciences. <i>Nature Reviews Molecular Cell Biology</i> , 2018, 19, 137-138.	16.1	6
84	Knocking Out Multiple Genes in Cultured Primary Neurons to Study Tubulin Posttranslational Modifications. <i>Methods in Molecular Biology</i> , 2020, 2101, 327-351.	0.4	6
85	The tubulin code in mammalian sperm development and function. <i>Seminars in Cell and Developmental Biology</i> , 2023, 137, 26-37.	2.3	6
86	Optochemistry to control the microtubule cytoskeleton. <i>EMBO Journal</i> , 2015, 34, 2114-2116.	3.5	4
87	Mutations in the most divergent $\beta$ -tubulin isotype, $\beta$ -tubulin, cause defective platelet biogenesis. <i>Journal of Thrombosis and Haemostasis</i> , 2022, 20, 461-469.	1.9	4
88	H-ABC and dystonia-causing <i>TUBB4A</i> mutations show distinct pathogenic effects. <i>Science Advances</i> , 2022, 8, eabj9229.	4.7	4
89	Solid-State NMR Spectroscopy for Studying Microtubules and Microtubule-Associated Proteins. <i>Methods in Molecular Biology</i> , 2021, 2305, 193-201.	0.4	3
90	Purification of Tubulin with Controlled Posttranslational Modifications and Isoforms from Limited Sources by Polymerization-Depolymerization Cycles. <i>Journal of Visualized Experiments</i> , 2020, , .	0.2	3

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91	Microtubule and auditory function – an underestimated connection. <i>Seminars in Cell and Developmental Biology</i> , 2023, 137, 74-86.	2.3	3
92	A unified reviewing format for grant applications and evaluations. <i>EMBO Reports</i> , 2018, 19, 187-188.	2.0	2