Frank Uhlmann

List of Publications by Year
in descending order

121 papers	12,285 citations	26610 56 h-index	29127 104 g-index
129 all docs	129 docs citations	129 times ranked	6659 citing authors

#	Article	IF	Citations
1	SMC complexes: Lifting the lid on loop extrusion. Current Opinion in Cell Biology, 2022, 74, 13-22.	2.6	30
2	Mediator recruits the cohesin loader Scc2 to RNA Pol II-transcribed genes and promotes sister chromatid cohesion. Current Biology, 2022, 32, 2884-2896.e6.	1.8	11
3	Analysis of Cell Cycle Progression in the Budding Yeast S. cerevisiae. Methods in Molecular Biology, 2021, 2329, 265-276.	0.4	0
4	Comparison of loop extrusion and diffusion capture as mitotic chromosome formation pathways in fission yeast. Nucleic Acids Research, 2021, 49, 1294-1312.	6.5	27
5	Bridging-induced phase separation induced by cohesin SMC protein complexes. Science Advances, 2021, 7, .	4.7	95
6	Structural characterisation of the Chaetomium thermophilum Chl1 helicase. PLoS ONE, 2021, 16, e0251261.	1.1	0
7	Budding yeast relies on G ₁ cyclin specificity to couple cell cycle progression with morphogenetic development. Science Advances, 2021, 7, .	4.7	16
8	A role for condensin in mediating transcriptional adaptation to environmental stimuli. Life Science Alliance, 2021, 4, e202000961.	1.3	3
9	A Brownian ratchet model for DNA loop extrusion by the cohesin complex. ELife, 2021, 10, .	2.8	56
10	Assessing Budding Yeast Phosphoproteome Dynamics in a Time-Resolved Manner using TMT10plex Mass Tag Labeling. STAR Protocols, 2020, 1, 100022.	0.5	7
11	A Structure-Based Mechanism for DNA Entry into the Cohesin Ring. Molecular Cell, 2020, 79, 917-933.e9.	4.5	112
12	Fission yeast condensin contributes to interphase chromatin organization and prevents transcription-coupled DNA damage. Genome Biology, 2020, 21, 272.	3.8	19
13	Conserved roles of chromatin remodellers in cohesin loading onto chromatin. Current Genetics, 2020, 66, 951-956.	0.8	12
14	Division of Labor between PCNA Loaders in DNA Replication and Sister Chromatid Cohesion Establishment. Molecular Cell, 2020, 78, 725-738.e4.	4.5	45
15	Cdc14 and PP2A Phosphatases Cooperate to Shape Phosphoproteome Dynamics during Mitotic Exit. Cell Reports, 2019, 29, 2105-2119.e4.	2.9	40
16	Efficient Depletion of Fission Yeast Condensin by Combined Transcriptional Repression and Auxin-Induced Degradation. Methods in Molecular Biology, 2019, 2004, 25-33.	0.4	4
17	A Role for Chromatin Remodeling in Cohesin Loading onto Chromosomes. Molecular Cell, 2019, 74, 664-673.e5.	4.5	62
18	Phosphoproteome dynamics during mitotic exit in budding yeast. EMBO Journal, 2018, 37, .	3.5	47

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19	Establishment of DNA-DNA Interactions by the Cohesin Ring. Cell, 2018, 172, 465-477.e15.	13.5	116
20	The Cks1/Cks2 axis fine-tunes Mll1 expression and is crucial for MLL-rearranged leukaemia cell viability. Biochimica Et Biophysica Acta - Molecular Cell Research, 2018, 1865, 105-116.	1.9	12
21	SMC complexes orchestrate the mitotic chromatin interaction landscape. Current Genetics, 2018, 64, 335-339.	0.8	41
22	A PxL motif promotes timely cell cycle substrate dephosphorylation by the Cdc14 phosphatase. Nature Structural and Molecular Biology, 2018, 25, 1093-1102.	3.6	31
23	Cell-Cycle Regulation of Dynamic Chromosome Association of the Condensin Complex. Cell Reports, 2018, 23, 2308-2317.	2.9	24
24	A global view of substrate phosphorylation and dephosphorylation during budding yeast mitotic exit. Microbial Cell, 2018, 5, 389-392.	1.4	12
25	Topological in vitro loading of the budding yeast cohesin ring onto DNA. Life Science Alliance, 2018, 1, e201800143.	1.3	49
26	Structure of the cohesin loader Scc2. Nature Communications, 2017, 8, 13952.	5.8	49
27	Building chromosomes without bricks. Science, 2017, 356, 1233-1234.	6.0	2
28	Separaseâ€“securin complex: a cunning way to control chromosome segregation. Nature Structural and Molecular Biology, 2017, 24, 337-339.	3.6	4
29	Structural Basis of Eco1-Mediated Cohesin Acetylation. Scientific Reports, 2017, 7, 44313.	1.6	10
30	PP2A Cdc55 Phosphatase Imposes Ordered Cell-Cycle Phosphorylation by Opposing Threonine Phosphorylation. Molecular Cell, 2017, 65, 393-402.e3.	4.5	91
31	Structural studies of <scp>RFC^C</scp>^{tf18} reveal a novel chromatin recruitment role for Dcc1. EMBO Reports, 2017, 18, 558-568.	2.0	19
32	Condensin-mediated remodeling of the mitotic chromatin landscape in fission yeast. Nature Genetics, 2017, 49, 1553-1557.	9.4	75
33	An In Vitro Assay for Monitoring Topological DNA Entrapment by the Chromosomal Cohesin Complex. Methods in Molecular Biology, 2017, 1515, 23-35.	0.4	4
34	Observation of DNA intertwining along authentic budding yeast chromosomes. Genes and Development, 2017, 31, 2151-2161.	2.7	12
35	SMC complexes: from DNA to chromosomes. Nature Reviews Molecular Cell Biology, 2016, 17, 399-412.	16.1	455
36	Ctf4 Links DNA Replication with Sister Chromatid Cohesion Establishment by Recruiting the Chl1 Helicase to the Replisome. Molecular Cell, 2016, 63, 371-384.	4.5	113

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37	Rapid movement and transcriptional reâ€‘localization of human cohesin on DNA. EMBO Journal, 2016, 35, 2671-2685.	3.5	216
38	Evidence for cohesin sliding along budding yeast chromosomes. Open Biology, 2016, 6, 150178.	1.5	60
39	DNA Entry into and Exit out of the Cohesin Ring by an Interlocking Gate Mechanism. Cell, 2015, 163, 1628-1640.	13.5	217
40	Structural Studies Reveal the Functional Modularity of the Scc2-Scc4 Cohesin Loader. Cell Reports, 2015, 12, 719-725.	2.9	60
41	Chromosome Condensation: Weaving an UntangledÂWeb. Current Biology, 2015, 25, R663-R666.	1.8	2
42	Nur1 Dephosphorylation Confers Positive Feedback to Mitotic Exit Phosphatase Activation in Budding Yeast. PLoS Genetics, 2015, 11, e1004907.	1.5	6
43	Identification of <scp>C</scp> dk targets that control cytokinesis. EMBO Journal, 2015, 34, 81-96.	3.5	56
44	A simple biophysical model emulates budding yeast chromosome condensation. ELife, 2015, 4, e05565.	2.8	87
45	Condensin aids sister chromatid decatenation by topoisomerase II. Nucleic Acids Research, 2014, 42, 340-348.	6.5	68
46	A silent revolution in chromosome biology. Nature Reviews Molecular Cell Biology, 2014, 15, 431-431.	16.1	4
47	Biochemical reconstitution of topological DNA binding by the cohesin ring. Nature, 2014, 505, 367-371.	13.7	274
48	The Scc2â€“Scc4 complex acts in sister chromatid cohesion and transcriptional regulation by maintaining nucleosome-free regions. Nature Genetics, 2014, 46, 1147-1151.	9.4	114
49	Open questions: Chromosome condensation - Why does a chromosome look like a chromosome?. BMC Biology, 2013, 11, 9.	1.7	7
50	Budding Yeast Wapl Controls Sister Chromatid Cohesion Maintenance and Chromosome Condensation. Current Biology, 2013, 23, 64-69.	1.8	114
51	An Eco1-independent sister chromatid cohesion establishment pathway in S. cerevisiae. Chromosoma, 2013, 122, 121-134.	1.0	76
52	Chromosome segregation: how to open cohesin without cutting the ring?. EMBO Journal, 2013, 32, 614-616.	3.5	4
53	ESCRTing DNA at the Cleavage Site During Cytokinesis. Science, 2012, 336, 166-167.	6.0	2
54	Condensin, Chromatin Crossbarring and Chromosome Condensation. Current Biology, 2012, 22, R1012-R1021.	1.8	83

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55	Facile synthesis of budding yeast aâ€factor and its use to synchronize cells of <i>Î±</i> mating type. Yeast, 2012, 29, 233-240.	0.8	27
56	A Quantitative Model for Ordered Cdk Substrate Dephosphorylation during Mitotic Exit. Cell, 2011, 147, 803-814.	13.5	112
57	Cohesin subunit Rad21L, the new kid on the block has new ideas. EMBO Reports, 2011, 12, 183-184.	2.0	8
58	Computational modelling of mitotic exit in budding yeast: the role of separase and Cdc14 endocycles. Journal of the Royal Society Interface, 2011, 8, 1128-1141.	1.5	24
59	A quantitative model for cyclin-dependent kinase control of the cell cycle: revisited. Philosophical Transactions of the Royal Society B: Biological Sciences, 2011, 366, 3572-3583.	1.8	77
60	System-level feedbacks make the anaphase switch irreversible. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 10016-10021.	3.3	55
61	Cohesin loading and sliding. Journal of Cell Science, 2011, 124, 685-691.	1.2	60
62	The â€˜anaphase problemâ€™: how to disable the mitotic checkpoint when sisters split. Biochemical Society Transactions, 2010, 38, 1660-1666.	1.6	14
63	Cell Cycle: The Art of Multi-Tasking. Current Biology, 2010, 20, R101-R103.	1.8	6
64	Sli15INCENP Dephosphorylation Prevents Mitotic Checkpoint Reengagement Due to Loss of Tension at Anaphase Onset. Current Biology, 2010, 20, 1396-1401.	1.8	77
65	Divide and die another day. Current Opinion in Cell Biology, 2010, 22, 764-765.	2.6	0
66	Hos1 Deacetylates Smc3 to Close the Cohesin Acetylation Cycle. Molecular Cell, 2010, 39, 677-688.	4.5	109
67	Cell cycle regulation by feedâ€forward loops coupling transcription and phosphorylation. Molecular Systems Biology, 2009, 5, 236.	3.2	44
68	Mitotic exit in mammalian cells. Molecular Systems Biology, 2009, 5, 324.	3.2	15
69	Systemâ€level feedbacks control cell cycle progression. FEBS Letters, 2009, 583, 3992-3998.	1.3	38
70	A matter of choice: the establishment of sister chromatid cohesion. EMBO Reports, 2009, 10, 1095-1102.	2.0	44
71	Irreversibility of mitotic exit is the consequence of systems-level feedback. Nature, 2009, 459, 592-595.	13.7	91
72	A mechanism for chromosome segregation sensing by the NoCut checkpoint. Nature Cell Biology, 2009, 11, 477-483.	4.6	118

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73	Conserved features of cohesin binding along fission yeast chromosomes. Genome Biology, 2009, 10, R52.	13.9	71
74	Cohesin branches out. Nature, 2008, 451, 777-778.	13.7	15
75	Cell-cycle regulation of cohesin stability along fission yeast chromosomes. EMBO Journal, 2008, 27, 111-121.	3.5	64
76	Cdk-counteracting phosphatases unlock mitotic exit. Current Opinion in Cell Biology, 2008, 20, 661-668.	2.6	119
77	Condensin-Dependent rDNA Decatenation Introduces a Temporal Pattern to Chromosome Segregation. Current Biology, 2008, 18, 1084-1089.	1.8	65
78	Eco1-Dependent Cohesin Acetylation During Establishment of Sister Chromatid Cohesion. Science, 2008, 321, 563-566.	6.0	453
79	Separase cooperates with Zds1 and Zds2 to activate Cdc14 phosphatase in early anaphase. Journal of Cell Biology, 2008, 182, 873-883.	2.3	61
80	Identification of <i>cis</i>-acting sites for condensin loading onto budding yeast chromosomes. Genes and Development, 2008, 22, 2215-2227.	2.7	302
81	Mitotic exit in two dimensions. Journal of Theoretical Biology, 2007, 248, 560-573.	0.8	21
82	In vivo analysis of cohesin architecture using FRET in the budding yeast Saccharomyces cerevisiae. EMBO Journal, 2007, 26, 3783-3793.	3.5	92
83	What is your assay for sister-chromatid cohesion?. EMBO Journal, 2007, 26, 4609-4618.	3.5	5
84	Displacement and re-accumulation of centromeric cohesin during transient pre-anaphase centromere splitting. Chromosoma, 2007, 116, 531-544.	1.0	42
85	Downregulation of PP2ACdc55 Phosphatase by Separase Initiates Mitotic Exit in Budding Yeast. Cell, 2006, 125, 719-732.	13.5	230
86	Establishment of Sister Chromatid Cohesion at the S. cerevisiae Replication Fork. Molecular Cell, 2006, 23, 787-799.	4.5	268
87	Chromosome Biology: The Crux of the Ring. Current Biology, 2006, 16, R102-R105.	1.8	8
88	More than a separase. Nature Cell Biology, 2005, 7, 930-932.	4.6	11
89	Stabilization of microtubule dynamics at anaphase onset promotes chromosome segregation. Nature, 2005, 433, 171-176.	13.7	160
90	Studies on Substrate Recognition by the Budding Yeast Separase. Journal of Biological Chemistry, 2004, 279, 1191-1196.	1.6	51

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91	Preferential cleavage of chromatin-bound cohesin after targeted phosphorylation by Polo-like kinase. EMBO Journal, 2004, 23, 3144-3153.	3.5	82
92	Cohesin relocation from sites of chromosomal loading to places of convergent transcription. Nature, 2004, 430, 573-578.	13.7	544
93	The mechanism of sister chromatid cohesion. Experimental Cell Research, 2004, 296, 80-85.	1.2	79
94	Cdc14 Phosphatase Induces rDNA Condensation and Resolves Cohesin-Independent Cohesion during Budding Yeast Anaphase. Cell, 2004, 117, 471-482.	13.5	232
95	Chromosome Cohesion and Separation: From Men and Molecules. Current Biology, 2003, 13, R104-R114.	1.8	100
96	A Model for ATP Hydrolysis-Dependent Binding of Cohesin to DNA. Current Biology, 2003, 13, 1930-1940.	1.8	191
97	Passenger acrobatics. Nature, 2003, 426, 780-781.	13.7	25
98	A non-proteolytic function of separase links the onset of anaphase to mitotic exit. Nature Cell Biology, 2003, 5, 249-254.	4.6	151
99	Division of the Nucleolus and Its Release of CDC14 during Anaphase of Meiosis I Depends on Separase, SPO12, and SLK19. Developmental Cell, 2003, 4, 727-739.	3.1	115
100	Separase regulation during mitosis. Biochemical Society Symposia, 2003, 70, 243-251.	2.7	26
101	Chromosome Segregation. Developmental Cell, 2002, 2, 381-382.	3.1	15
102	The Dual Mechanism of Separase Regulation by Securin. Current Biology, 2002, 12, 973-982.	1.8	131
103	Keeping the genome in shape. Nature, 2002, 417, 135-136.	13.7	3
104	Phosphorylation of the Cohesin Subunit Scc1 by Polo/Cdc5 Kinase Regulates Sister Chromatid Separation in Yeast. Cell, 2001, 105, 459-472.	13.5	358
105	Secured cutting: controlling separase at the metaphase to anaphase transition. EMBO Reports, 2001, 2, 487-492.	2.0	72
106	Orchestrating anaphase and mitotic exit: separase cleavage and localization of Slk19. Nature Cell Biology, 2001, 3, 771-777.	4.6	134
107	Degradation of a cohesin subunit by the N-end rule pathway is essential for chromosome stability. Nature, 2001, 410, 955-959.	13.7	264
108	Cohesion, but not too close. Current Biology, 2001, 11, R378.	1.8	14

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109	Chromosome condensation: Packaging the genome. Current Biology, 2001, 11, R384-R387.	1.8	15
110	Chromosome cohesion and segregation in mitosis and meiosis. Current Opinion in Cell Biology, 2001, 13, 754-761.	2.6	71
111	Chromosome cohesion: A polymerase for chromosome bridges. Current Biology, 2000, 10, R698-R700.	1.8	9
112	Characterization of fission yeast cohesin: essential anaphase proteolysis of Rad21 phosphorylated in the S phase. Genes and Development, 2000, 14, 2757-2770.	2.7	256
113	Cleavage of Cohesin by the CD Clan Protease Separin Triggers Anaphase in Yeast. Cell, 2000, 103, 375-386.	13.5	765
114	Disjunction of Homologous Chromosomes in Meiosis I Depends on Proteolytic Cleavage of the Meiotic Cohesin Rec8 by Separin. Cell, 2000, 103, 387-398.	13.5	418
115	Splitting the Chromosome: Cutting the Ties That Bind Sister Chromatids. Science, 2000, 288, 1379-1384.	6.0	407
116	Sister-chromatid separation at anaphase onset is promoted by cleavage of the cohesin subunit Scc1. Nature, 1999, 400, 37-42.	13.7	882
117	Cohesion between sister chromatids must be established during DNA replication. Current Biology, 1998, 8, 1095-1102.	1.8	431
118	Cloning and characterization of promoter and 5â€²-UTR of the NMDA receptor subunit Ïµ2: evidence for alternative splicing of 5â€²-non-coding exon. Gene, 1998, 208, 259-269.	1.0	66
119	Deletion Analysis of the Large Subunit p140 in Human Replication Factor C Reveals Regions Required for Complex Formation and Replication Activities. Journal of Biological Chemistry, 1997, 272, 10058-10064.	1.6	131
120	Identification of Regions within the Four Small Subunits of Human Replication Factor C Required for Complex Formation and DNA Replication. Journal of Biological Chemistry, 1997, 272, 10065-10071.	1.6	74
121	A Complex Consisting of Human Replication Factor C p40, p37, and p36 Subunits Is a DNA-dependent ATPase and an Intermediate in the Assembly of the Holoenzyme. Journal of Biological Chemistry, 1997, 272, 18974-18981.	1.6	89