

# Karoline Schnizer-Luger

## List of Publications by Year in descending order

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105  
papers

19,380  
citations

43973

48  
h-index

34900

98  
g-index

140  
all docs

140  
docs citations

140  
times ranked

14124  
citing authors

#	ARTICLE	IF	CITATIONS
1	Crystal structure of the nucleosome core particle at 2.8Å resolution. <i>Nature</i> , 1997, 389, 251-260.	13.7	8,091
2	Solvent Mediated Interactions in the Structure of the Nucleosome Core Particle at 1.9Å Resolution. <i>Journal of Molecular Biology</i> , 2002, 319, 1097-1113.	2.0	1,340
3	Reconstitution of Nucleosome Core Particles from Recombinant Histones and DNA. <i>Methods in Enzymology</i> , 2003, 375, 23-44.	0.4	709
4	Preparation of nucleosome core particle from recombinant histones. <i>Methods in Enzymology</i> , 1999, 304, 3-19.	0.4	671
5	New insights into nucleosome and chromatin structure: an ordered state or a disordered affair?. <i>Nature Reviews Molecular Cell Biology</i> , 2012, 13, 436-447.	16.1	573
6	The Nucleosomal Surface as a Docking Station for Kaposi's Sarcoma Herpesvirus LANA. <i>Science</i> , 2006, 311, 856-861.	6.0	469
7	The histone tails of the nucleosome. <i>Current Opinion in Genetics and Development</i> , 1998, 8, 140-146.	1.5	460
8	Structural determinants for generating centromeric chromatin. <i>Nature</i> , 2004, 430, 578-582.	13.7	364
9	Structure of the yeast nucleosome core particle reveals fundamental changes in internucleosome interactions. <i>EMBO Journal</i> , 2001, 20, 5207-5218.	3.5	360
10	DNA binding within the nucleosome core. <i>Current Opinion in Structural Biology</i> , 1998, 8, 33-40.	2.6	275
11	Structure and dynamic behavior of nucleosomes. <i>Current Opinion in Genetics and Development</i> , 2003, 13, 127-135.	1.5	270
12	The Histone Variant H2A.W Defines Heterochromatin and Promotes Chromatin Condensation in <i>Arabidopsis</i> . <i>Cell</i> , 2014, 158, 98-109.	13.5	257
13	Nucleosome structure and dynamics are coming of age. <i>Nature Structural and Molecular Biology</i> , 2019, 26, 3-13.	3.6	233
14	The role of the nucleosome acidic patch in modulating higher order chromatin structure. <i>Journal of the Royal Society Interface</i> , 2013, 10, 20121022.	1.5	200
15	A New Fluorescence Resonance Energy Transfer Approach Demonstrates That the Histone Variant H2AZ Stabilizes the Histone Octamer within the Nucleosome. <i>Journal of Biological Chemistry</i> , 2004, 279, 24274-24282.	1.6	193
16	Nucleosome and chromatin fiber dynamics. <i>Current Opinion in Structural Biology</i> , 2005, 15, 188-196.	2.6	191
17	Nucleosome-binding affinity as a primary determinant of the nuclear mobility of the pioneer transcription factor FoxA. <i>Genes and Development</i> , 2009, 23, 804-809.	2.7	190
18	Histone chaperone FACT action during transcription through chromatin by RNA polymerase II. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 7654-7659.	3.3	182

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19	The Histone Chaperone FACT: Structural Insights and Mechanisms for Nucleosome Reorganization. <i>Journal of Biological Chemistry</i> , 2011, 286, 18369-18374.	1.6	181
20	The structure of nucleosome assembly protein 1. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 1248-1253.	3.3	178
21	Nucleosome accessibility governed by the dimer/tetramer interface. <i>Nucleic Acids Research</i> , 2011, 39, 3093-3102.	6.5	175
22	FACT caught in the act of manipulating the nucleosome. <i>Nature</i> , 2020, 577, 426-431.	13.7	160
23	Dynamic nucleosomes. <i>Chromosome Research</i> , 2006, 14, 5-16.	1.0	149
24	Structure of histone-based chromatin in Archaea. <i>Science</i> , 2017, 357, 609-612.	6.0	149
25	Crystal Structures of Nucleosome Core Particles in Complex with Minor Groove DNA-binding Ligands. <i>Journal of Molecular Biology</i> , 2003, 326, 371-380.	2.0	147
26	Histone Chaperone FACT Coordinates Nucleosome Interaction through Multiple Synergistic Binding Events. <i>Journal of Biological Chemistry</i> , 2011, 286, 41883-41892.	1.6	129
27	Automodification switches PARP-1 function from chromatin architectural protein to histone chaperone. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 12752-12757.	3.3	127
28	The Core Histone N-terminal Tail Domains Function Independently and Additively during Salt-dependent Oligomerization of Nucleosomal Arrays. <i>Journal of Biological Chemistry</i> , 2005, 280, 33701-33706.	1.6	123
29	Single and double box HMGB proteins differentially destabilize nucleosomes. <i>Nucleic Acids Research</i> , 2019, 47, 666-678.	6.5	122
30	Torque modulates nucleosome stability and facilitates H2A/H2B dimer loss. <i>Nature Communications</i> , 2013, 4, 2579.	5.8	116
31	Decoding the centromeric nucleosome through CENP-N. <i>ELife</i> , 2017, 6, .	2.8	101
32	A charged and contoured surface on the nucleosome regulates chromatin compaction. <i>Nature Structural and Molecular Biology</i> , 2007, 14, 1105-1107.	3.6	99
33	From The Cover: Molecular recognition of the nucleosomal "supergroove". <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 6864-6869.	3.3	90
34	A Thermodynamic Model for Nap1-Histone Interactions. <i>Journal of Biological Chemistry</i> , 2008, 283, 32412-32418.	1.6	83
35	Alternative Modes of Binding of Poly(ADP-ribose) Polymerase 1 to Free DNA and Nucleosomes. <i>Journal of Biological Chemistry</i> , 2012, 287, 32430-32439.	1.6	78
36	Histone Core Phosphorylation Regulates DNA Accessibility. <i>Journal of Biological Chemistry</i> , 2015, 290, 22612-22621.	1.6	76

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37	Replication Stress Shapes a Protective Chromatin Environment across Fragile Genomic Regions. <i>Molecular Cell</i> , 2018, 69, 36-47.e7.	4.5	75
38	Energetics and Affinity of the Histone Octamer for Defined DNA Sequences. <i>Biochemistry</i> , 2001, 40, 10927-10933.	1.2	74
39	A Multilaboratory Comparison of Calibration Accuracy and the Performance of External References in Analytical Ultracentrifugation. <i>PLoS ONE</i> , 2015, 10, e0126420.	1.1	71
40	DNA-mediated association of two histone-bound complexes of yeast Chromatin Assembly Factor-1 (CAF-1) drives tetrasome assembly in the wake of DNA replication. <i>ELife</i> , 2017, 6, .	2.8	71
41	Chaperone Nap1 Shields Histone Surfaces Used in a Nucleosome and Can Put H2A-H2B in an Unconventional Tetrameric Form. <i>Molecular Cell</i> , 2013, 51, 662-677.	4.5	69
42	The histone chaperone FACT modulates nucleosome structure by tethering its components. <i>Life Science Alliance</i> , 2018, 1, e201800107.	1.3	68
43	Mechanistic insights into histone deposition and nucleosome assembly by the chromatin assembly factor-1. <i>Nucleic Acids Research</i> , 2018, 46, 9907-9917.	6.5	67
44	Yeast CAF-1 assembles histone (H3-H4) <sub>2</sub> tetramers prior to DNA deposition. <i>Nucleic Acids Research</i> , 2012, 40, 10139-10149.	6.5	66
45	Histone chaperone specificity in Rtt109 activation. <i>Nature Structural and Molecular Biology</i> , 2008, 15, 957-964.	3.6	62
46	Structural and Biophysical Studies of Human PARP-1 in Complex with Damaged DNA. <i>Journal of Molecular Biology</i> , 2010, 395, 983-994.	2.0	60
47	A quantitative investigation of linker histone interactions with nucleosomes and chromatin. <i>Scientific Reports</i> , 2016, 6, 19122.	1.6	59
48	Poly(ADP-ribose) polymerase 1 searches DNA via a "monkey bar"™ mechanism. <i>ELife</i> , 2018, 7, .	2.8	56
49	The right place at the right time: chaperoning core histone variants. <i>EMBO Reports</i> , 2015, 16, 1454-1466.	2.0	55
50	Fluorescence strategies for high-throughput quantification of protein interactions. <i>Nucleic Acids Research</i> , 2012, 40, e33-e33.	6.5	53
51	Nucleosomes in Solution Exist as a Mixture of Twist-defect States. <i>Journal of Molecular Biology</i> , 2005, 345, 103-114.	2.0	52
52	Inhibitors of PARP: Number crunching and structure gazing. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, e2121979119.	3.3	52
53	Biophysical analysis and small-angle X-ray scattering-derived structures of MeCP2 nucleosome complexes. <i>Nucleic Acids Research</i> , 2011, 39, 4122-4135.	6.5	49
54	Bivalent interaction of the PZP domain of BRPF1 with the nucleosome impacts chromatin dynamics and acetylation. <i>Nucleic Acids Research</i> , 2016, 44, 472-484.	6.5	49

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55	Role of the Loop Containing Residue 115 in the Induced-Fit Mechanism of the Bacterial Cell Wall Biosynthetic Enzyme MurA. <i>Biochemistry</i> , 2000, 39, 2164-2173.	1.2	47
56	The Linker Region of MacroH2A Promotes Self-association of Nucleosomal Arrays. <i>Journal of Biological Chemistry</i> , 2011, 286, 23852-23864.	1.6	47
57	Virus-encoded histone doublets are essential and form nucleosome-like structures. <i>Cell</i> , 2021, 184, 4237-4250.e19.	13.5	47
58	The BRCT domain of PARP1 binds intact DNA and mediates intrastrand transfer. <i>Molecular Cell</i> , 2021, 81, 4994-5006.e5.	4.5	44
59	HPF1 and nucleosomes mediate a dramatic switch in activity of PARP1 from polymerase to hydrolase. <i>ELife</i> , 2021, 10, .	2.8	43
60	Investigating the Dynamics of Destabilized Nucleosomes Using Methyl-TROSY NMR. <i>Journal of the American Chemical Society</i> , 2018, 140, 4774-4777.	6.6	42
61	Histone Parylation factor 1 contributes to the inhibition of PARP1 by cancer drugs. <i>Nature Communications</i> , 2021, 12, 736.	5.8	40
62	Histone chaperone FACT Facilitates Chromatin Transcription: mechanistic and structural insights. <i>Current Opinion in Structural Biology</i> , 2020, 65, 26-32.	2.6	36
63	Archaeal chromatin "slinkies" are inherently dynamic complexes with deflected DNA wrapping pathways. <i>ELife</i> , 2021, 10, .	2.8	36
64	Histone Acetylation near the Nucleosome Dyad Axis Enhances Nucleosome Disassembly by RSC and SWI/SNF. <i>Molecular and Cellular Biology</i> , 2015, 35, 4083-4092.	1.1	35
65	Bridging of nucleosome-proximal DNA double-strand breaks by PARP2 enhances its interaction with HPF1. <i>PLoS ONE</i> , 2020, 15, e0240932.	1.1	33
66	CENP-N promotes the compaction of centromeric chromatin. <i>Nature Structural and Molecular Biology</i> , 2022, 29, 403-413.	3.6	32
67	The Cac2 subunit is essential for productive histone binding and nucleosome assembly in CAF-1. <i>Scientific Reports</i> , 2017, 7, 46274.	1.6	30
68	Quantifying Chromatin-Associated Interactions. <i>Methods in Enzymology</i> , 2012, 512, 243-274.	0.4	28
69	Constitutive centromere-associated network contacts confer differential stability on CENP-A nucleosomes in vitro and in the cell. <i>Molecular Biology of the Cell</i> , 2018, 29, 751-762.	0.9	27
70	Archaea: The Final Frontier of Chromatin. <i>Journal of Molecular Biology</i> , 2021, 433, 166791.	2.0	26
71	Assembly of Nucleosomal Arrays from Recombinant Core Histones and Nucleosome Positioning DNA. <i>Journal of Visualized Experiments</i> , 2013, , .	0.2	25
72	Histone Chaperone Nap1 Is a Major Regulator of Histone H2A-H2B Dynamics at the Inducible GAL Locus. <i>Molecular and Cellular Biology</i> , 2016, 36, 1287-1296.	1.1	24

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73	PARP inhibitors trap PARP2 and alter the mode of recruitment of PARP2 at DNA damage sites. <i>Nucleic Acids Research</i> , 2022, 50, 3958-3973.	6.5	24
74	Nucleosomes Meet Their Remodeler Match. <i>Trends in Biochemical Sciences</i> , 2021, 46, 41-50.	3.7	23
75	The Transcription Factor Spn1 Regulates Gene Expression via a Highly Conserved Novel Structural Motif. <i>Journal of Molecular Biology</i> , 2010, 404, 1-15.	2.0	22
76	Analytical Ultracentrifugation (AUC): An Overview of the Application of Fluorescence and Absorbance AUC to the Study of Biological Macromolecules. <i>Current Protocols in Molecular Biology</i> , 2020, 133, e131.	2.9	21
77	The elongation factor Spn1 is a multi-functional chromatin binding protein. <i>Nucleic Acids Research</i> , 2018, 46, 2321-2334.	6.5	19
78	Probing the Conformational Changes Associated with DNA Binding to PARP1. <i>Biochemistry</i> , 2020, 59, 2003-2011.	1.2	19
79	Nonspecific Binding of RNA to PARP1 and PARP2 Does Not Lead to Catalytic Activation. <i>Biochemistry</i> , 2019, 58, 5107-5111.	1.2	18
80	EvoChromo: towards a synthesis of chromatin biology and evolution. <i>Development (Cambridge)</i> , 2019, 146, .	1.2	16
81	Q-FADD: A Mechanistic Approach for Modeling the Accumulation of Proteins at Sites of DNA Damage. <i>Biophysical Journal</i> , 2019, 116, 2224-2233.	0.2	16
82	Scm3 deposits a (Cse4 $\hat{=}$ H4) <sub>2</sub> tetramer onto DNA through a Cse4 $\hat{=}$ H4 dimer intermediate. <i>Nucleic Acids Research</i> , 2014, 42, 5532-5542.	6.5	14
83	Coordinated Action of Nap1 and RSC in Disassembly of Tandem Nucleosomes. <i>Molecular and Cellular Biology</i> , 2016, 36, 2262-2271.	1.1	13
84	Archaeal $\langle \text{scp} \rangle$ DNA on the histone merry-go-round. <i>FEBS Journal</i> , 2018, 285, 3168-3174.	2.2	13
85	SMARCAD1 is an ATP-dependent histone octamer exchange factor with de novo nucleosome assembly activity. <i>Science Advances</i> , 2021, 7, eabk2380.	4.7	13
86	Quantitating repair protein accumulation at DNA lesions: Past, present, and future. <i>DNA Repair</i> , 2019, 81, 102650.	1.3	12
87	Picking a nucleosome lock: Sequence- and structure-specific recognition of the nucleosome. <i>Journal of Biosciences</i> , 2020, 45, 1.	0.5	9
88	FRET-based Stoichiometry Measurements of Protein Complexes in vitro. <i>Bio-protocol</i> , 2018, 8, .	0.2	7
89	Spn1 and Its Dynamic Interactions with Spt6, Histones and Nucleosomes. <i>Journal of Molecular Biology</i> , 2022, 434, 167630.	2.0	5
90	Measuring Nucleosome Assembly Activity in vitro with the Nucleosome Assembly and Quantification (NAQ) Assay. <i>Bio-protocol</i> , 2018, 8, .	0.2	4

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91	The secret life of histones. <i>Science</i> , 2020, 369, 33-33.	6.0	4
92	Yeast CAF-1 assembles histone (H3-H4) 2 tetramers prior to DNA deposition. <i>Nucleic Acids Research</i> , 2017, 45, 9811-9812.	6.5	3
93	Solution structure(s) of trinucleosomes from contrast variation SAXS. <i>Nucleic Acids Research</i> , 2021, 49, 5028-5037.	6.5	3
94	PARP1 and Sox2: An Unlikely Team of Pioneers to Conquer the Nucleosome. <i>Molecular Cell</i> , 2017, 65, 581-582.	4.5	2
95	Kinetics of DNA-protein association and dissociation by stopped-flow spectroscopy. <i>Methods in Enzymology</i> , 2019, 625, 135-156.	0.4	2
96	Biochemical and Biophysical Methods for Analysis of Poly(ADP-Ribose) Polymerase 1 and Its Interactions with Chromatin. <i>Methods in Molecular Biology</i> , 2017, 1608, 231-253.	0.4	2
97	Picking a nucleosome lock: Sequence- and structure-specific recognition of the nucleosome. <i>Journal of Biosciences</i> , 2020, 45, .	0.5	2
98	Navigating the structure of COMPASS. <i>ELife</i> , 2020, 9, .	2.8	1
99	Putting numbers on chromatin and its interacting partners. <i>Methods</i> , 2014, 70, 75-76.	1.9	0
100	Editorial overview: Nucleic acid movers and shakers. <i>Current Opinion in Structural Biology</i> , 2014, 24, v-vii.	2.6	0
101	Nucleosome thermodynamics, histone modifications, and histone chaperone function. <i>FASEB Journal</i> , 2010, 24, 310.2.	0.2	0
102	Title is missing!. , 2020, 15, e0240932.		0
103	Title is missing!. , 2020, 15, e0240932.		0
104	Title is missing!. , 2020, 15, e0240932.		0
105	Title is missing!. , 2020, 15, e0240932.		0