

Structure of histone-based chromatin in Archaea

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Evolution of epigenetic chromatin states. Current Opinion in Chemical Biology, 2017, 41, 36-42.	6.1	12
2	Structural Biology: Probing the Origins of Chromatin. Current Biology, 2017, 27, R1118-R1120.	3.9	1
3	Conservation Biology: A Walking Stickâ€™s Redux on Lord Howe Island. Current Biology, 2017, 27, R1120-R1122.	3.9	0
4	Structural insights into archaeal chromatin. Nature Reviews Microbiology, 2017, 15, 575-575.	28.6	0
5	Crystal Structure of Overlapping Dinucleosome, the New Basic Unit of Chromatin. Seibutsu Butsuri, 2017, 57, 309-311.	0.1	0
6	Phylogenetic analysis of the core histone doublet and DNA topo II genes of Marseilleviridae: evidence of proto-eukaryotic provenance. Epigenetics and Chromatin, 2017, 10, 55.	3.9	33
7	Symbiotic Origin of Eukaryotic Nucleus: From Cell Body to Neo-Energide. Plant Cell Monographs, 2018, , 39-66.	0.4	23
8	Concepts in Cell Biology - History and Evolution. Plant Cell Monographs, 2018, , .	0.4	0
9	The 4D Nucleome: Genome Compartmentalization in an Evolutionary Context. Biochemistry (Moscow), 2018, 83, 313-325.	1.5	31
10	Four domains: The fundamental unicell and Post-Darwinian Cognition-Based Evolution. Progress in Biophysics and Molecular Biology, 2018, 140, 49-73.	2.9	33
11	Structural diversity of the nucleosome. Journal of Biochemistry, 2018, 163, 85-95.	1.7	73
12	Evidence for the implication of the histone code in building the genome structure. BioSystems, 2018, 164, 49-59.	2.0	52
13	Crystallographic analysis of the overlapping dinucleosome as a novel chromatin unit. Biophysics and Physicobiology, 2018, 15, 251-254.	1.0	0
14	Molecular structure of promoter-bound yeast TFIID. Nature Communications, 2018, 9, 4666.	12.8	32
15	Population Epigenomics: Advancing Understanding of Phenotypic Plasticity, Acclimation, Adaptation and Diseases. Population Genomics, 2018, , 179-260.	0.5	18
16	Structure and function of archaeal histones. PLoS Genetics, 2018, 14, e1007582.	3.5	74
17	Snapshots of archaeal DNA replication and repair in living cells using super-resolution imaging. Nucleic Acids Research, 2018, 46, 10757-10770.	14.5	16
18	Coil conversion to Î²-strand induced by dimerization. Proteins: Structure, Function and Bioinformatics, 2018, 86, 1221-1230.	2.6	0

#	ARTICLE	IF	CITATIONS
19	Modifying Chromatin by Histone Tail Clipping. <i>Journal of Molecular Biology</i> , 2018, 430, 3051-3067.	4.2	33
20	Archaeal <scp>DNA</scp> on the histone merry-go-round. <i>FEBS Journal</i> , 2018, 285, 3168-3174.	4.7	13
21	Direct Observation of H3â€H4 Octasome by Highâ€Speed AFM. <i>Chemistry - A European Journal</i> , 2018, 24, 15998-16002.	3.3	19
22	Transcription of Bacterial Chromatin. <i>Journal of Molecular Biology</i> , 2019, 431, 4040-4066.	4.2	51
23	Adenovirus Entry: From Infection to Immunity. <i>Annual Review of Virology</i> , 2019, 6, 177-197.	6.7	113
24	A Single-Molecule View of Archaeal Transcription. <i>Journal of Molecular Biology</i> , 2019, 431, 4116-4131.	4.2	13
25	Key Concepts and Challenges in Archaeal Transcription. <i>Journal of Molecular Biology</i> , 2019, 431, 4184-4201.	4.2	35
26	EvoChromo: towards a synthesis of chromatin biology and evolution. <i>Development (Cambridge)</i> , 2019, 146, .	2.5	16
27	Contributions of single-cell genomics to our understanding of planktonic marine archaea. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2019, 374, 20190096.	4.0	9
28	TFS and Spt4/5 accelerate transcription through archaeal histoneâ€based chromatin. <i>Molecular Microbiology</i> , 2019, 111, 784-797.	2.5	24
29	Transcription initiation factor TBP: old friend new questions. <i>Biochemical Society Transactions</i> , 2019, 47, 411-423.	3.4	32
30	Polysialic Acid Modulates Only the Antimicrobial Properties of Distinct Histones. <i>ACS Omega</i> , 2019, 4, 1601-1610.	3.5	10
31	Mosaic origin of the eukaryotic kinetochore. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 12873-12882.	7.1	76
32	The Role of Archaeal Chromatin in Transcription. <i>Journal of Molecular Biology</i> , 2019, 431, 4103-4115.	4.2	19
33	Archaeal Histone Contributions to the Origin of Eukaryotes. <i>Trends in Microbiology</i> , 2019, 27, 703-714.	7.7	38
34	Old cogs, new tricks: the evolution of gene expression in a chromatin context. <i>Nature Reviews Genetics</i> , 2019, 20, 283-297.	16.3	86
35	Biophysics of Chromatin Dynamics. <i>Annual Review of Biophysics</i> , 2019, 48, 321-345.	10.0	102
36	Chromatin research and biological engineering: an evolving relationship poised for new biomedical impacts. <i>Current Opinion in Systems Biology</i> , 2019, 14, 73-81.	2.6	3

#	ARTICLE	IF	CITATIONS
37	A new type of DNA phosphorothioation-based antiviral system in archaea. Nature Communications, 2019, 10, 1688.	12.8	54
39	Functions of Archaeal Nucleoid Proteins: Archaeal Silencers are Still Missing. , 2019, , 29-45.		1
40	Nuclear and Extranuclear DNA in Insects. , 2019, , 73-102.		0
41	Epigenetics and the dynamics of chromatin during adenovirus infections. FEBS Letters, 2019, 593, 3551-3570.	2.8	25
42	The architects of bacterial DNA bridges: a structurally and functionally conserved family of proteins. Open Biology, 2019, 9, 190223.	3.6	44
43	Histones predate the split between bacteria and archaea. Bioinformatics, 2019, 35, 2349-2353.	4.1	17
44	Architectural roles of Cren7 in folding crenarchaeal chromatin filament. Molecular Microbiology, 2019, 111, 556-569.	2.5	11
45	The origin of chromosomal histones in a 30S ribosomal protein. Gene, 2020, 726, 144155.	2.2	1
46	Thermosensitive Nucleosome Editing Reveals the Role of DNA Sequence in Targeted Histone Variant Deposition. Cell Reports, 2020, 30, 257-268.e5.	6.4	16
47	Multidomain ribosomal protein trees and the planctobacterial origin of neomura (eukaryotes,) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T	2.1	50
48	Programmable Assembly of DNA-protein Hybrid Structures. Chemical Research in Chinese Universities, 2020, 36, 211-218.	2.6	4
49	Chromosome organization in bacteria: mechanistic insights into genome structure and function. Nature Reviews Genetics, 2020, 21, 227-242.	16.3	144
50	Zinc as a plausible epigenetic modulator of glioblastoma multiforme. European Journal of Pharmacology, 2020, 887, 173549.	3.5	9
52	Histone variants in archaea and the evolution of combinatorial chromatin complexity. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 33384-33395.	7.1	34
53	Primary Role of the Nucleosome. Molecular Cell, 2020, 79, 371-375.	9.7	104
54	Archaeal transcription. Transcription, 2020, 11, 199-210.	3.1	12
55	Archaeal Chromatin Proteins Cren7 and Sul7d Compact DNA by Bending and Bridging. MBio, 2020, 11, .	4.1	11
56	Different Proteins Mediate Step-Wise Chromosome Architectures in Thermoplasma acidophilum and Pyrobaculum calidifontis. Frontiers in Microbiology, 2020, 11, 1247.	3.5	9

#	ARTICLE	IF	CITATIONS
57	The histone H3-H4 tetramer is a copper reductase enzyme. <i>Science</i> , 2020, 369, 59-64.	12.6	60
58	The secret life of histones. <i>Science</i> , 2020, 369, 33-33.	12.6	4
59	FttA is a CPSF73 homologue that terminates transcription in Archaea. <i>Nature Microbiology</i> , 2020, 5, 545-553.	13.3	23
60	Lysine-specific acetylated proteome from the archaeon <i>Thermococcus gammatolerans</i> reveals the presence of acetylated histones. <i>Journal of Proteomics</i> , 2021, 232, 104044.	2.4	12
61	Mechanical and structural properties of archaeal hypernucleosomes. <i>Nucleic Acids Research</i> , 2021, 49, 4338-4349.	14.5	16
62	Architecture of the multi-functional SAGA complex and the molecular mechanism of holding TBP. <i>FEBS Journal</i> , 2021, 288, 3135-3147.	4.7	9
63	Chiral Systems Made from DNA. <i>Advanced Science</i> , 2021, 8, 2003113.	11.2	42
64	Did Cyclic Metaphosphates Have a Role in the Origin of Life?. <i>Origins of Life and Evolution of Biospheres</i> , 2021, 51, 1-60.	1.9	12
65	Histone variants at a glance. <i>Journal of Cell Science</i> , 2021, 134, .	2.0	101
66	Archaeal chromatin "slinkies" are inherently dynamic complexes with deflected DNA wrapping pathways. <i>ELife</i> , 2021, 10, .	6.0	36
67	Archaea: The Final Frontier of Chromatin. <i>Journal of Molecular Biology</i> , 2021, 433, 166791.	4.2	26
68	Serial Endosymbiosis Theory: From biology to astronomy and back to the origin of life. <i>BioSystems</i> , 2021, 202, 104353.	2.0	4
69	The structure of a virus-encoded nucleosome. <i>Nature Structural and Molecular Biology</i> , 2021, 28, 413-417.	8.2	40
73	Extended Archaeal Histone-Based Chromatin Structure Regulates Global Gene Expression in <i>Thermococcus kodakarensis</i> . <i>Frontiers in Microbiology</i> , 2021, 12, 681150.	3.5	13
74	Crystal and solution structures reveal oligomerization of individual capsid homology domains of <i>Drosophila</i> Arc. <i>PLoS ONE</i> , 2021, 16, e0251459.	2.5	7
75	Soft-matter properties of multilayer chromosomes. <i>Physical Biology</i> , 2021, 18, 053001.	1.8	5
76	Virus-encoded histone doublets are essential and form nucleosome-like structures. <i>Cell</i> , 2021, 184, 4237-4250.e19.	28.9	47
77	Small Proteins in Archaea, a Mainly Unexplored World. <i>Journal of Bacteriology</i> , 2022, 204, JB0031321.	2.2	14

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81	Unraveling DNA Organization with Single-Molecule Force Spectroscopy Using Magnetic Tweezers. <i>Methods in Molecular Biology</i> , 2018, 1837, 317-349.	0.9	10
82	Genome-in-a-Box: Building a Chromosome from the Bottom Up. <i>ACS Nano</i> , 2021, 15, 111-124.	14.6	16
87	VivosX, a disulfide crosslinking method to capture site-specific, protein-protein interactions in yeast and human cells. <i>ELife</i> , 2018, 7, .	6.0	11
88	Chromatinization of <i>Escherichia coli</i> with archaeal histones. <i>ELife</i> , 2019, 8, .	6.0	23
89	The DNA-binding protein HTa from <i>Thermoplasma acidophilum</i> is an archaeal histone analog. <i>ELife</i> , 2019, 8, .	6.0	18
98	3 tera-basepairs as a fundamental limit for robust DNA replication. <i>Physical Biology</i> , 2020, 17, 046002.	1.8	1
100	An archaeal histone-like protein regulates gene expression in response to salt stress. <i>Nucleic Acids Research</i> , 2021, 49, 12732-12743.	14.5	22
101	The hyperthermophilic archaeon <i>Thermococcus kodakarensis</i> is resistant to pervasive negative supercoiling activity of DNA gyrase. <i>Nucleic Acids Research</i> , 2021, 49, 12332-12347.	14.5	3
103	Novel Classes and Evolutionary Turnover of Histone H2B Variants in the Mammalian Germline. <i>Molecular Biology and Evolution</i> , 2022, 39, .	8.9	18
105	Multiple roles of Pol epsilon in eukaryotic chromosome replication. <i>Biochemical Society Transactions</i> , 2022, , .	3.4	1
106	Histone variants in archaea – An undiscovered country. <i>Seminars in Cell and Developmental Biology</i> , 2023, 135, 50-58.	5.0	10
108	DNA-Binding Properties of a Novel Crenarchaeal Chromatin-Organizing Protein in <i>Sulfolobus acidocaldarius</i> . <i>Biomolecules</i> , 2022, 12, 524.	4.0	1
109	Deep Conservation of Histone Variants in Thermococcales Archaea. <i>Genome Biology and Evolution</i> , 2022, 14, .	2.5	6
110	Protein embeddings and deep learning predict binding residues for various ligand classes. <i>Scientific Reports</i> , 2021, 11, 23916.	3.3	63
111	Single-Molecule/Cell Analyses Reveal Principles of Genome-Folding Mechanisms in the Three Domains of Life. <i>International Journal of Molecular Sciences</i> , 2021, 22, 13432.	4.1	0
112	A phylogenetic and proteomic reconstruction of eukaryotic chromatin evolution. <i>Nature Ecology and Evolution</i> , 2022, 6, 1007-1023.	7.8	26
113	The pleiotropic roles of SPT5 in transcription. <i>Transcription</i> , 2022, 13, 53-69.	3.1	15
115	Nucleosome Structures Built from Highly Divergent Histones: Parasites and Giant DNA Viruses. <i>Epigenomes</i> , 2022, 6, 22.	1.8	3

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116	Profile of Karolin Luger. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	0
117	How to Shut Down Transcription in Archaea during Virus Infection. Microorganisms, 2022, 10, 1824.	3.6	1
118	Micrococcal Nuclease Digestion Assays for the Analysis of Chromosome Structure in Archaea. Methods in Molecular Biology, 2022, , 29-38.	0.9	0
119	Columnar structure of human telomeric chromatin. Nature, 2022, 609, 1048-1055.	27.8	27
121	Cryo-electron microscopy structure of the H3-H4 octasome: A nucleosome-like particle without histones H2A and H2B. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	4
122	A giant virus genome is densely packaged by stable nucleosomes within virions. Molecular Cell, 2022, , .	9.7	7
123	A new chromatin flavor to cap chromosomes: Where structure, function, and evolution meet. Molecular Cell, 2022, 82, 4199-4201.	9.7	1
124	Nucleosomes and their complexes in the cryoEM era: Trends and limitations. Frontiers in Molecular Biosciences, 0, 9, .	3.5	2
125	Faithful to the Marseille tradition: Unique and intriguing thatâ€™s how Marseillevirus packs its DNA. Molecular Cell, 2022, 82, 4401-4402.	9.7	0
127	Role of the histone tails in histone octamer transfer. Nucleic Acids Research, 0, , .	14.5	4
128	The Hypersaline Archaeal Histones HpyA and HstA Are DNA Binding Proteins That Defy Categorization According to Commonly Used Functional Criteria. MBio, 2023, 14, .	4.1	2
131	Systematic comparison of unilamellar vesicles reveals that archaeal core lipid membranes are more permeable than bacterial membranes. PLoS Biology, 2023, 21, e3002048.	5.6	6
132	Specific DNA binding of archaeal histones HMfA and HMfB. Frontiers in Microbiology, 0, 14, .	3.5	4
134	Proteinâ€“DNA Interactions. , 2022, , 522-571.		0
136	Histone divergence in trypanosomes results in unique alterations to nucleosome structure. Nucleic Acids Research, 2023, 51, 7882-7899.	14.5	3
137	Histones direct site-specific CRISPR spacer acquisition in model archaeon. Nature Microbiology, 2023, 8, 1682-1694.	13.3	0
138	DNA-bridging by an archaeal histone variant via a unique tetramerisation interface. Communications Biology, 2023, 6, .	4.4	3
139	Probing archaeal cell biology: exploring the use of dyes in the imaging of Sulfolobus cells. Frontiers in Microbiology, 0, 14, .	3.5	0

#	ARTICLE	IF	CITATIONS
140	Histones with an unconventional DNA-binding mode in vitro are major chromatin constituents in the bacterium Bdellovibrio bacteriovorus. Nature Microbiology, 2023, 8, 2006-2019.	13.3	6
143	Domain Archaea: Structural and Phylogenetic Relations With Domain Eukarya. , 2024, , 828-838.		0
144	The chromatin landscape of the euryarchaeon Haloferax volcanii. Genome Biology, 2023, 24, .	8.8	0
146	On the origin of the nucleus: a hypothesis. Microbiology and Molecular Biology Reviews, 0, , .	6.6	0
147	The role of cryptic ancestral symmetry in histone folding mechanisms across Eukarya and Archaea. PLoS Computational Biology, 2024, 20, e1011721.	3.2	0
148	Nucleosomes at the Dawn of Eukaryotes. Genome Biology and Evolution, 2024, 16, .	2.5	0
149	Archaeal histone-based chromatin structures regulate transcription elongation rates. Communications Biology, 2024, 7, .	4.4	0