Kristian Helin

List of Publications by Year
in descending order

115 papers	24,850 citations	14644 66 h-index	21521 114 g-index
124 all docs	124 docs citations	124 times ranked	28411 citing authors

#	Article	IF	Citations
1	UTX and JMJD3 are histone H3K27 demethylases involved in HOX gene regulation and development. Nature, 2007, 449, 731-734.	13.7	1,183
2	Genome-wide mapping of Polycomb target genes unravels their roles in cell fate transitions. Genes and Development, 2006, 20, 1123-1136.	2.7	1,098
3	EZH2 is downstream of the pRB-E2F pathway, essential for proliferation and amplified in cancer. EMBO Journal, 2003, 22, 5323-5335.	3.5	1,052
4	TET1 and hydroxymethylcytosine in transcription and DNA methylation fidelity. Nature, 2011, 473, 343-348.	13.7	905
5	Role of TET enzymes in DNA methylation, development, and cancer. Genes and Development, 2016, 30, 733-750.	2.7	781
6	Suz12 is essential for mouse development and for EZH2 histone methyltransferase activity. EMBO Journal, 2004, 23, 4061-4071.	3.5	778
7	The Polycomb group proteins bind throughout the INK4A-ARF locus and are disassociated in senescent cells. Genes and Development, 2007, 21, 525-530.	2.7	775
8	Transcriptional regulation by Polycomb group proteins. Nature Structural and Molecular Biology, 2013, 20, 1147-1155.	3.6	757
9	Molecular mechanisms and potential functions of histone demethylases. Nature Reviews Molecular Cell Biology, 2012, 13, 297-311.	16.1	708
10	The putative oncogene GASC1 demethylates tri- and dimethylated lysine 9 on histone H3. Nature, 2006, 442, 307-311.	13.7	670
11	A model for transmission of the H3K27me3 epigenetic mark. Nature Cell Biology, 2008, 10, 1291-1300.	4.6	656
12	Reduced H3K27me3 and DNA Hypomethylation Are Major Drivers of Gene Expression in K27M Mutant Pediatric High-Grade Gliomas. Cancer Cell, 2013, 24, 660-672.	7.7	633
13	The Polycomb Group Protein Suz12 Is Required for Embryonic Stem Cell Differentiation. Molecular and Cellular Biology, 2007, 27, 3769-3779.	1.1	628
14	Apaf-1 is a transcriptional target for E2F and p53. Nature Cell Biology, 2001, 3, 552-558.	4.6	552
15	Polycomb group proteins: navigators of lineage pathways led astray in cancer. Nature Reviews Cancer, 2009, 9, 773-784.	12.8	537
16	JARID2 regulates binding of the Polycomb repressive complexâ€‰2 to target genes in ES cells. Nature, 2010, 464, 306-310.	13.7	499
17	E2F target genes: unraveling the biology. Trends in Biochemical Sciences, 2004, 29, 409-417.	3.7	497
18	RBP2 Belongs to a Family of Demethylases, Specific for Tri-and Dimethylated Lysine 4 on Histone 3. Cell, 2007, 128, 1063-1076.	13.5	485

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19	Histone lysine demethylases as targets for anticancer therapy. Nature Reviews Drug Discovery, 2013, 12, 917-930.	21.5	413
20	Molecular Mechanisms Directing PRC2 Recruitment and H3K27 Methylation. Molecular Cell, 2019, 74, 8-18.	4.5	393
21	EZH2 is a potential therapeutic target for H3K27M-mutant pediatric gliomas. Nature Medicine, 2017, 23, 483-492.	15.2	392
22	Polycomb Complex 2 Is Required for <i>E-cadherin</i> Repression by the Snail1 Transcription Factor. Molecular and Cellular Biology, 2008, 28, 4772-4781.	1.1	390
23	Chromatin proteins and modifications as drug targets. Nature, 2013, 502, 480-488.	13.7	389
24	The H3K27me3 demethylase JMJD3 contributes to the activation of the<i>INK4Aâ€"ARF</i>locus in response to oncogene- and stress-induced senescence. Genes and Development, 2009, 23, 1171-1176.	2.7	384
25	Maintaining cell identity: PRC2-mediated regulation of transcription and cancer. Nature Reviews Cancer, 2016, 16, 803-810.	12.8	368
26	Gene Silencing Triggers Polycomb Repressive Complex 2 Recruitment to CpG Islands Genome Wide. Molecular Cell, 2014, 55, 347-360.	4.5	358
27	Fbxl10/Kdm2b Recruits Polycomb Repressive Complex 1 to CpG Islands and Regulates H2A Ubiquitylation. Molecular Cell, 2013, 49, 1134-1146.	4.5	351
28	Histone demethylases in development and disease. Trends in Cell Biology, 2010, 20, 662-671.	3.6	329
29	Characterization of an antagonistic switch between histone H3 lysine 27 methylation and acetylation in the transcriptional regulation of Polycomb group target genes. Nucleic Acids Research, 2010, 38, 4958-4969.	6.5	317
30	Chromatin Repressive Complexes in Stem Cells, Development, and Cancer. Cell Stem Cell, 2014, 14, 735-751.	5.2	301
31	Polycomb complexes act redundantly to repress genomic repeats and genes. Genes and Development, 2010, 24, 265-276.	2.7	298
32	Tet Proteins Connect the O-Linked N-acetylglucosamine Transferase Ogt to Chromatin in Embryonic Stem Cells. Molecular Cell, 2013, 49, 645-656.	4.5	285
33	DNA methylation: TET proteinsâ€"guardians of CpG islands?. EMBO Reports, 2012, 13, 28-35.	2.0	269
34	Histone methyltransferases in cancer. Seminars in Cell and Developmental Biology, 2010, 21, 209-220.	2.3	262
35	Role of the Polycomb Repressive Complex 2 in Acute Promyelocytic Leukemia. Cancer Cell, 2007, 11, 513-525.	7.7	228
36	Jarid2 Is Implicated in the Initial Xist-Induced Targeting of PRC2 to the Inactive X Chromosome. Molecular Cell, 2014, 53, 301-316.	4.5	221

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37	Loss of <i>TET2</i> in hematopoietic cells leads to DNA hypermethylation of active enhancers and induction of leukemogenesis. Genes and Development, 2015, 29, 910-922.	2.7	213
38	Polycomb Cbx family members mediate the balance between haematopoietic stem cell self-renewal andÂdifferentiation. Nature Cell Biology, 2013, 15, 353-362.	4.6	211
39	Jarid2 binds mono-ubiquitylated H2A lysine 119 to mediate crosstalk between Polycomb complexes PRC1 and PRC2. Nature Communications, 2016, 7, 13661.	5.8	207
40	The emerging functions of histone demethylases. Current Opinion in Genetics and Development, 2008, 18, 159-168.	1.5	201
41	ATAD2 Is a Novel Cofactor for MYC, Overexpressed and Amplified in Aggressive Tumors. Cancer Research, 2009, 69, 8491-8498.	0.4	201
42	A Functional Link between the Histone Demethylase PHF8 and the Transcription Factor ZNF711 in X-Linked Mental Retardation. Molecular Cell, 2010, 38, 165-178.	4.5	186
43	APAF1 is a key transcriptional target for p53 in the regulation of neuronal cell death. Journal of Cell Biology, 2001, 155, 207-216.	2.3	184
44	E2F-6: a novel member of the E2F family is an inhibitor of E2F-dependent transcription. Oncogene, 1998, 17, 611-623.	2.6	183
45	Jarid1b targets genes regulating development and is involved in neural differentiation. EMBO Journal, 2011, 30, 4586-4600.	3.5	183
46	Bypass of senescence by the polycomb group protein CBX8 through direct binding to the INK4A-ARF locus. EMBO Journal, 2007, 26, 1637-1648.	3.5	175
47	Accurate H3K27 methylation can be established de novo by SUZ12-directed PRC2. Nature Structural and Molecular Biology, 2018, 25, 225-232.	3.6	162
48	The lncRNA MIR31HG regulates p16INK4A expression to modulate senescence. Nature Communications, 2015, 6, 6967.	5.8	161
49	Role of the Polycomb Repressive Complex 2 (PRC2) in Transcriptional Regulation and Cancer. Cold Spring Harbor Perspectives in Medicine, 2016, 6, a026575.	2.9	151
50	NEK11 regulates CDC25A degradation and the IR-induced G2/M checkpoint. Nature Cell Biology, 2009, 11, 1247-1253.	4.6	122
51	Quantitative Mass Spectrometry of Histones H3.2 and H3.3 in Suz12-deficient Mouse Embryonic Stem Cells Reveals Distinct, Dynamic Post-translational Modifications at Lys-27 and Lys-36. Molecular and Cellular Proteomics, 2010, 9, 838-850.	2.5	121
52	E2F-1-Induced p53-independent apoptosis in transgenic mice. Oncogene, 1998, 17, 143-155.	2.6	119
53	Optimizing sgRNA position markedly improves the efficiency of CRISPR/dCas9-mediated transcriptional repression. Nucleic Acids Research, 2016, 44, e141-e141.	6.5	118
54	Genome-wide profiling identifies a DNA methylation signature that associates with TET2 mutations in diffuse large B-cell lymphoma. Haematologica, 2013, 98, 1912-1920.	1.7	116

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55	The Histone Demethylase Jarid1b Ensures Faithful Mouse Development by Protecting Developmental Genes from Aberrant H3K4me3. PLoS Genetics, 2013, 9, e1003461.	1.5	114
56	Loss of the retinoblastoma protein-related p130 protein in small cell lung carcinoma. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 6933-6938.	3.3	113
57	Non-core Subunits of the PRC2 Complex Are Collectively Required for Its Target-Site Specificity. Molecular Cell, 2019, 76, 423-436.e3.	4.5	108
58	E2F1 is crucial for E2Fâ€dependent apoptosis. EMBO Reports, 2005, 6, 661-668.	2.0	106
59	PRMT5 methylome profiling uncovers a direct link to splicing regulation in acute myeloid leukemia. Nature Structural and Molecular Biology, 2019, 26, 999-1012.	3.6	105
60	Epigenetic control of IL-23 expression in keratinocytes is important for chronic skin inflammation. Nature Communications, 2018, 9, 1420.	5.8	88
61	Oncohistones: drivers of pediatric cancers. Genes and Development, 2017, 31, 2313-2324.	2.7	85
62	Continual removal of H3K9 promoter methylation by Jmjd2 demethylases is vital for <scp>ESC</scp> selfâ€renewal and early development. EMBO Journal, 2016, 35, 1550-1564.	3.5	84
63	Quantification of Differential Transcription Factor Activity and Multiomics-Based Classification into Activators and Repressors: diffTF. Cell Reports, 2019, 29, 3147-3159.e12.	2.9	84
64	Utx Is Required for Proper Induction of Ectoderm and Mesoderm during Differentiation of Embryonic Stem Cells. PLoS ONE, 2013, 8, e60020.	1.1	81
65	KDM4A regulates the maternal-to-zygotic transition by protecting broad H3K4me3 domains from H3K9me3 invasion in oocytes. Nature Cell Biology, 2020, 22, 380-388.	4.6	77
66	Middleâ€down hybrid chromatography/tandem mass spectrometry workflow for characterization of combinatorial postâ€translational modifications in histones. Proteomics, 2014, 14, 2200-2211.	1.3	76
67	Systems Level Analysis of Histone H3 Post-translational Modifications (PTMs) Reveals Features of PTM Crosstalk in Chromatin Regulation. Molecular and Cellular Proteomics, 2016, 15, 2715-2729.	2.5	76
68	shRNA screening identifies JMJD1C as being required for leukemia maintenance. Blood, 2014, 123, 1870-1882.	0.6	73
69	ZFP57 maintains the parent-of-origin-specific expression of the imprinted genes and differentially affects non-imprinted targets in mouse embryonic stem cells. Nucleic Acids Research, 2016, 44, 8165-8178.	6.5	73
70	Jmjd2/Kdm4 demethylases are required for expression of <i>Il3ra</i> and survival of acute myeloid leukemia cells. Genes and Development, 2016, 30, 1278-1288.	2.7	69
71	DNMT3AR882H mutant and Tet2 inactivation cooperate in the deregulation of DNA methylation control to induce lymphoid malignancies in mice. Leukemia, 2016, 30, 1388-1398.	3.3	67
72	The Histone Lysine Demethylase JMJD3/KDM6B Is Recruited to p53 Bound Promoters and Enhancer Elements in a p53 Dependent Manner. PLoS ONE, 2014, 9, e96545.	1.1	67

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73	TET2 binding to enhancers facilitates transcription factor recruitment in hematopoietic cells. Genome Research, 2019, 29, 564-575.	2.4	66
74	RSV-Induced H3K4 Demethylase KDM5B Leads to Regulation of Dendritic Cell-Derived Innate Cytokines and Exacerbates Pathogenesis In Vivo. PLoS Pathogens, 2015, 11, e1004978.	2.1	63
75	The Demethylase JMJD2C Localizes to H3K4me3-Positive Transcription Start Sites and Is Dispensable for Embryonic Development. Molecular and Cellular Biology, 2014, 34, 1031-1045.	1.1	62
76	Histone editing elucidates the functional roles of H3K27 methylation and acetylation in mammals. Nature Genetics, 2022, 54, 754-760.	9.4	59
77	PRMT5 Inhibition Modulates E2F1 Methylation and Gene-Regulatory Networks Leading to Therapeutic Efficacy in JAK2V617F-Mutant MPN. Cancer Discovery, 2020, 10, 1742-1757.	7.7	55
78	TET2 mutations are associated with hypermethylation at key regulatory enhancers in normal and malignant hematopoiesis. Nature Communications, 2021, 12, 6061.	5.8	47
79	Chromatin modifier HUSH co-operates with RNA decay factor NEXT to restrict transposable element expression. Molecular Cell, 2022, 82, 1691-1707.e8.	4.5	43
80	Complex-dependent histone acetyltransferase activity of KAT8 determines its role in transcription and cellular homeostasis. Molecular Cell, 2021, 81, 1749-1765.e8.	4.5	42
81	Tumor suppressor ASXL1 is essential for the activation of INK4B expression in response to oncogene activity and anti-proliferative signals. Cell Research, 2015, 25, 1205-1218.	5.7	41
82	The histone demethylase Jarid1b is required for hematopoietic stem cell self-renewal in mice. Blood, 2015, 125, 2075-2078.	0.6	40
83	The KDM4/JMJD2 histone demethylases are required for hematopoietic stem cell maintenance. Blood, 2019, 134, 1154-1158.	0.6	40
84	PR-DUB maintains the expression of critical genes through FOXK1/2- and ASXL1/2/3-dependent recruitment to chromatin and H2AK119ub1 deubiquitination. Genome Research, 2020, 30, 1119-1130.	2.4	36
85	MPP8 is essential for sustaining self-renewal of ground-state pluripotent stem cells. Nature Communications, 2021, 12, 3034.	5.8	35
86	Identification of recurrent FHL2-GLI2 oncogenic fusion in sclerosing stromal tumors of the ovary. Nature Communications, 2020, 11, 44.	5.8	34
87	Epigenetic Regulation of Angiogenesis by JARID1B-Induced Repression of HOXA5. Arteriosclerosis, Thrombosis, and Vascular Biology, 2015, 35, 1645-1652.	1.1	33
88	A Functional Link between Nuclear RNA Decay and Transcriptional Control Mediated by the Polycomb Repressive Complex 2. Cell Reports, 2019, 29, 1800-1811.e6.	2.9	32
89	PLZF targets developmental enhancers for activation during osteogenic differentiation of human mesenchymal stem cells. ELife, 2019, 8, .	2.8	32
90	SATB2 preserves colon stem cell identity and mediates ileum-colon conversion via enhancer remodeling. Cell Stem Cell, 2022, 29, 101-115.e10.	5.2	31

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91	NEK11â˘Linking CHK1 and CDC25A in DNA damage checkpoint signaling. Cell Cycle, 2010, 9, 450-455.	1.3	29
92	Mutant FOXL2C134W Hijacks SMAD4 and SMAD2/3 to Drive Adult Granulosa Cell Tumors. Cancer Research, 2020, 80, 3466-3479.	0.4	29
93	PROSER1 mediates TET2 O-GlcNAcylation to regulate DNA demethylation on UTX-dependent enhancers and CpG islands. Life Science Alliance, 2022, 5, e202101228.	1.3	24
94	The SETDB1â€“TRIM28 Complex Suppresses Antitumor Immunity. Cancer Immunology Research, 2021, 9, 1413-1424.	1.6	24
95	Maternal expression of the JMJD2A/KDM4A histone demethylase is critical for pre-implantation development. Development (Cambridge), 2017, 144, 3264-3277.	1.2	23
96	E2F activates late-G1 events but cannot replace E1A in inducing S phase in terminally differentiated skeletal muscle cells. Oncogene, 1999, 18, 5054-5062.	2.6	21
97	E2F1-mediated transcriptional inhibition of the plasminogen activator inhibitor type 1 gene. FEBS Journal, 2001, 268, 4969-4978.	0.2	20
98	Aggressiveness of non-EMT breast cancer cells relies on FBXO11 activity. Molecular Cancer, 2018, 17, 171.	7.9	20
99	SWI/SNF Subunits SMARCA4, SMARCD2 and DPF2 Collaborate in MLL-Rearranged Leukaemia Maintenance. PLoS ONE, 2015, 10, e0142806.	1.1	19
100	Human CDT1 Associates with CDC7 and Recruits CDC45 to Chromatin during S Phase. Journal of Biological Chemistry, 2009, 284, 3028-3036.	1.6	17
101	A Screen Identifies the Oncogenic Micro-RNA miR-378a-5p as a Negative Regulator of Oncogene-Induced Senescence. PLoS ONE, 2014, 9, e91034.	1.1	17
102	Isolation and characterization of DUSP11, a novel p53 target gene. Journal of Cellular and Molecular Medicine, 2009, 13, 2158-2170.	1.6	15
103	The Lysine Demethylase KDM5B Regulates Islet Function and Glucose Homeostasis. Journal of Diabetes Research, 2019, 2019, 1-15.	1.0	15
104	Targeting RIOK2 ATPase activity leads to decreased protein synthesis and cell death in acute myeloid leukemia. Blood, 2022, 139, 245-255.	0.6	13
105	The p53 Tumour Suppressor Protein. Biotechnology and Genetic Engineering Reviews, 2000, 17, 179-212.	2.4	10
106	The Role of Chromatin-Associated Proteins in Cancer. Annual Review of Cancer Biology, 2017, 1, 355-377.	2.3	10
107	CpG island reconfiguration for the establishment and synchronization of polycomb functions upon exit from naive pluripotency. Molecular Cell, 2022, 82, 1169-1185.e7.	4.5	10
108	BMP2/SMAD pathway activation in JAK2/p53-mutant megakaryocyte/erythroid progenitors promotes leukemic transformation. Blood, 2022, 139, 3630-3646.	0.6	9

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109	The histone demethylase Jarid1b mediates angiotensin IIâ€induced endothelial dysfunction by controlling the 3â€²UTR of soluble epoxide hydrolase. Acta Physiologica, 2019, 225, e13168.	1.8	8
110	TET1: an epigenetic guardian of lymphomagenesis. Nature Immunology, 2015, 16, 592-594.	7.0	4
111	Regional tumour glutamine supply affects chromatin and cell identity. Nature Cell Biology, 2016, 18, 1027-1029.	4.6	4
112	Generation of locus-specific degradable tag knock-ins in mouse and human cell lines. STAR Protocols, 2021, 2, 100575.	0.5	4
113	Comprehensive and unbiased multiparameter high-throughput screening by compaRe finds effective and subtle drug responses in AML models. ELife, 2022, 11, .	2.8	2
114	ChIP-Sequencing of. Methods in Molecular Biology, 2021, 2272, 251-262.	0.4	1
115	Regulation of cell proliferation by the E2F transcription factors. Biochemical Society Transactions, 1999, 27, A64-A64.	1.6	0