

# Bradley R Cairns

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/11393764/publications.pdf>

Version: 2024-02-01

103  
papers

18,343  
citations

17405

63  
h-index

31759

101  
g-index

112  
all docs

112  
docs citations

112  
times ranked

16930  
citing authors

#	ARTICLE	IF	CITATIONS
1	The Biology of Chromatin Remodeling Complexes. <i>Annual Review of Biochemistry</i> , 2009, 78, 273-304.	5.0	1,891
2	Distinctive chromatin in human sperm packages genes for embryo development. <i>Nature</i> , 2009, 460, 473-478.	13.7	1,178
3	ING2 PHD domain links histone H3 lysine 4 methylation to active gene repression. <i>Nature</i> , 2006, 442, 96-99.	13.7	851
4	Mechanisms of action and regulation of ATP-dependent chromatin-remodelling complexes. <i>Nature Reviews Molecular Cell Biology</i> , 2017, 18, 407-422.	16.1	828
5	RSC, an Essential, Abundant Chromatin-Remodeling Complex. <i>Cell</i> , 1996, 87, 1249-1260.	13.5	654
6	DNA Demethylation in Zebrafish Involves the Coupling of a Deaminase, a Glycosylase, and Gadd45. <i>Cell</i> , 2008, 135, 1201-1212.	13.5	594
7	Conserved roles of mouse DUX and human DUX4 in activating cleavage-stage genes and MERVL/HERVL retrotransposons. <i>Nature Genetics</i> , 2017, 49, 925-934.	9.4	545
8	Chromatin remodelling: the industrial revolution of DNA around histones. <i>Nature Reviews Molecular Cell Biology</i> , 2006, 7, 437-447.	16.1	496
9	Genome-Wide Dynamics of Htz1, a Histone H2A Variant that Poises Repressed/Basal Promoters for Activation through Histone Loss. <i>Cell</i> , 2005, 123, 219-231.	13.5	460
10	The adult human testis transcriptional cell atlas. <i>Cell Research</i> , 2018, 28, 1141-1157.	5.7	426
11	The logic of chromatin architecture and remodelling at promoters. <i>Nature</i> , 2009, 461, 193-198.	13.7	399
12	Identification of direct targets and modified bases of RNA cytosine methyltransferases. <i>Nature Biotechnology</i> , 2013, 31, 458-464.	9.4	373
13	Reprogramming the Maternal Zebrafish Genome after Fertilization to Match the Paternal Methylation Pattern. <i>Cell</i> , 2013, 153, 759-772.	13.5	354
14	Nucleosome mobilization catalysed by the yeast SWI/SNF complex. <i>Nature</i> , 1999, 400, 784-787.	13.7	306
15	Chromatin and Transcription Transitions of Mammalian Adult Germline Stem Cells and Spermatogenesis. <i>Cell Stem Cell</i> , 2014, 15, 239-253.	5.2	280
16	Alterations in sperm DNA methylation patterns at imprinted loci in two classes of infertility. <i>Fertility and Sterility</i> , 2010, 94, 1728-1733.	0.5	259
17	Distinct roles for the RSC and Swi/Snf ATP-dependent chromatin remodelers in DNA double-strand break repair. <i>Genes and Development</i> , 2005, 19, 1656-1661.	2.7	258
18	Genome-wide analysis identifies changes in histone retention and epigenetic modifications at developmental and imprinted gene loci in the sperm of infertile men. <i>Human Reproduction</i> , 2011, 26, 2558-2569.	0.4	247

#	ARTICLE	IF	CITATIONS
19	Age-Associated Sperm DNA Methylation Alterations: Possible Implications in Offspring Disease Susceptibility. <i>PLoS Genetics</i> , 2014, 10, e1004458.	1.5	238
20	Human RNA polymerase III transcriptomes and relationships to Pol II promoter chromatin and enhancer-binding factors. <i>Nature Structural and Molecular Biology</i> , 2010, 17, 620-628.	3.6	234
21	Activation Domain-Mediated Targeting of the SWI/SNF Complex to Promoters Stimulates Transcription from Nucleosome Arrays. <i>Molecular Cell</i> , 1999, 4, 649-655.	4.5	231
22	Chromatin remodeling: insights and intrigue from single-molecule studies. <i>Nature Structural and Molecular Biology</i> , 2007, 14, 989-996.	3.6	223
23	Chromatin remodeling by RSC involves ATP-dependent DNA translocation. <i>Genes and Development</i> , 2002, 16, 2120-2134.	2.7	222
24	Tandem bromodomains in the chromatin remodeler RSC recognize acetylated histone H3 Lys14. <i>EMBO Journal</i> , 2004, 23, 1348-1359.	3.5	213
25	Two Functionally Distinct Forms of the RSC Nucleosome-Remodeling Complex, Containing Essential AT Hook, BAH, and Bromodomains. <i>Molecular Cell</i> , 1999, 4, 715-723.	4.5	205
26	Two Actin-Related Proteins Are Shared Functional Components of the Chromatin-Remodeling Complexes RSC and SWI/SNF. <i>Molecular Cell</i> , 1998, 2, 639-651.	4.5	200
27	Chromatin and Single-Cell RNA-Seq Profiling Reveal Dynamic Signaling and Metabolic Transitions during Human Spermatogonial Stem Cell Development. <i>Cell Stem Cell</i> , 2017, 21, 533-546.e6.	5.2	200
28	DNA Translocation and Loop Formation Mechanism of Chromatin Remodeling by SWI/SNF and RSC. <i>Molecular Cell</i> , 2006, 24, 559-568.	4.5	198
29	Chromatin remodeling through directional DNA translocation from an internal nucleosomal site. <i>Nature Structural and Molecular Biology</i> , 2005, 12, 747-755.	3.6	195
30	Activated RSC-Nucleosome Complex and Persistently Altered Form of the Nucleosome. <i>Cell</i> , 1998, 94, 29-34.	13.5	190
31	Dnmt2 functions in the cytoplasm to promote liver, brain, and retina development in zebrafish. <i>Genes and Development</i> , 2007, 21, 261-266.	2.7	179
32	The HSA domain binds nuclear actin-related proteins to regulate chromatin-remodeling ATPases. <i>Nature Structural and Molecular Biology</i> , 2008, 15, 469-476.	3.6	177
33	RSC regulates nucleosome positioning at Pol II genes and density at Pol III genes. <i>EMBO Journal</i> , 2008, 27, 100-110.	3.5	175
34	Genes for embryo development are packaged in blocks of multivalent chromatin in zebrafish sperm. <i>Genome Research</i> , 2011, 21, 578-589.	2.4	175
35	A Rsc3/Rsc30 Zinc Cluster Dimer Reveals Novel Roles for the Chromatin Remodeler RSC in Gene Expression and Cell Cycle Control. <i>Molecular Cell</i> , 2001, 7, 741-751.	4.5	174
36	Chromatin remodeling machines: similar motors, ulterior motives. <i>Trends in Biochemical Sciences</i> , 1998, 23, 20-25.	3.7	170

#	ARTICLE	IF	CITATIONS
37	The RNA polymerase III transcriptome revealed by genome-wide localization and activity-occupancy relationships. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 14695-14700.	3.3	164
38	The Dynamic Transcriptional Cell Atlas of Testis Development during Human Puberty. <i>Cell Stem Cell</i> , 2020, 26, 262-276.e4.	5.2	155
39	Chromatin remodeling complexes: strength in diversity, precision through specialization. <i>Current Opinion in Genetics and Development</i> , 2005, 15, 185-190.	1.5	153
40	Aberrant sperm DNA methylation predicts male fertility status and embryo quality. <i>Fertility and Sterility</i> , 2015, 104, 1388-1397.e5.	0.5	153
41	Zebra Fish Dnmt1 and Suv39h1 Regulate Organ-Specific Terminal Differentiation during Development. <i>Molecular and Cellular Biology</i> , 2006, 26, 7077-7085.	1.1	143
42	Regulation of ISWI involves inhibitory modules antagonized by nucleosomal epitopes. <i>Nature</i> , 2012, 492, 280-284.	13.7	137
43	Placeholder Nucleosomes Underlie Germline-to-Embryo DNA Methylation Reprogramming. <i>Cell</i> , 2018, 172, 993-1006.e13.	13.5	137
44	The Genome-Wide Localization of Rsc9, a Component of the RSC Chromatin-Remodeling Complex, Changes in Response to Stress. <i>Molecular Cell</i> , 2002, 9, 563-573.	4.5	135
45	Dephosphorylation and Genome-Wide Association of Maf1 with Pol III-Transcribed Genes during Repression. <i>Molecular Cell</i> , 2006, 22, 633-644.	4.5	128
46	Autoregulation of the Rsc4 Tandem Bromodomain by Gcn5 Acetylation. <i>Molecular Cell</i> , 2007, 27, 817-828.	4.5	124
47	Dnmt3 and G9a Cooperate for Tissue-specific Development in Zebrafish. <i>Journal of Biological Chemistry</i> , 2010, 285, 4110-4121.	1.6	114
48	Transcriptional Inhibition of Genes with Severe Histone H3 Hypoacetylation in the Coding Region. <i>Molecular Cell</i> , 2002, 10, 925-933.	4.5	109
49	The nuclear actin-related proteins Arp7 and Arp9: a dimeric module that cooperates with architectural proteins for chromatin remodeling. <i>EMBO Journal</i> , 2003, 22, 3175-3187.	3.5	104
50	Single-cell analysis of the developing human testis reveals somatic niche cell specification and fetal germline stem cell establishment. <i>Cell Stem Cell</i> , 2021, 28, 764-778.e4.	5.2	104
51	The Yaf9 Component of the SWR1 and NuA4 Complexes Is Required for Proper Gene Expression, Histone H4 Acetylation, and Htz1 Replacement near Telomeres. <i>Molecular and Cellular Biology</i> , 2004, 24, 9424-9436.	1.1	101
52	Rsc4 Connects the Chromatin Remodeler RSC to RNA Polymerases. <i>Molecular and Cellular Biology</i> , 2006, 26, 4920-4933.	1.1	98
53	DNA Demethylase Activity Maintains Intestinal Cells in an Undifferentiated State Following Loss of APC. <i>Cell</i> , 2010, 142, 930-942.	13.5	96
54	Dynamic transcriptome of <i>Schizosaccharomyces pombe</i> shown by RNA-DNA hybrid mapping. <i>Nature Genetics</i> , 2008, 40, 977-986.	9.4	95

#	ARTICLE	IF	CITATIONS
55	Paternal aging and associated intraindividual alterations of global sperm 5-methylcytosine and 5-hydroxymethylcytosine levels. <i>Fertility and Sterility</i> , 2013, 100, 945-951.e2.	0.5	93
56	Structure of the RSC complex bound to the nucleosome. <i>Science</i> , 2019, 366, 838-843.	6.0	92
57	Structure and function of the SWIRM domain, a conserved protein module found in chromatin regulatory complexes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 2057-2062.	3.3	89
58	Conformational flexibility in the chromatin remodeler RSC observed by electron microscopy and the orthogonal tilt reconstruction method. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 4913-4918.	3.3	84
59	The RSC chromatin remodelling ATPase translocates DNA with high force and small step size. <i>EMBO Journal</i> , 2011, 30, 2364-2372.	3.5	84
60	Histone trimethylation by Set1 is coordinated by the RRM, autoinhibitory, and catalytic domains. <i>EMBO Journal</i> , 2005, 24, 1222-1231.	3.5	83
61	Structure of an actin-related subcomplex of the SWI/SNF chromatin remodeler. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 3345-3350.	3.3	81
62	Regulation of DNA Translocation Efficiency within the Chromatin Remodeler RSC/Sth1 Potentiates Nucleosome Sliding and Ejection. <i>Molecular Cell</i> , 2016, 62, 453-461.	4.5	81
63	Epigenetic regulation of colon cancer and intestinal stem cells. <i>Current Opinion in Cell Biology</i> , 2013, 25, 177-183.	2.6	80
64	SINE transcription by RNA polymerase III is suppressed by histone methylation but not by DNA methylation. <i>Nature Communications</i> , 2015, 6, 6569.	5.8	80
65	The chromatin remodelers RSC and ISW1 display functional and chromatin-based promoter antagonism. <i>ELife</i> , 2015, 4, e06073.	2.8	68
66	Histone deacetylases 1 and 2 maintain S-phase chromatin and DNA replication fork progression. <i>Epigenetics and Chromatin</i> , 2013, 6, 27.	1.8	62
67	The RSC Chromatin Remodeling Complex Bears an Essential Fungal-Specific Protein Module With Broad Functional Roles. <i>Genetics</i> , 2006, 172, 795-809.	1.2	61
68	Transcription and imprinting dynamics in developing postnatal male germline stem cells. <i>Genes and Development</i> , 2015, 29, 2312-2324.	2.7	61
69	p53 convergently activates Dux/DUX4 in embryonic stem cells and in facioscapulohumeral muscular dystrophy cell models. <i>Nature Genetics</i> , 2021, 53, 1207-1220.	9.4	59
70	Dissecting mammalian spermatogenesis using spatial transcriptomics. <i>Cell Reports</i> , 2021, 37, 109915.	2.9	54
71	Counteracting H3K4 methylation modulators Set1 and Jhd2 co-regulate chromatin dynamics and gene transcription. <i>Nature Communications</i> , 2016, 7, 11949.	5.8	50
72	The Interactions of Yeast SWI/SNF and RSC with the Nucleosome before and after Chromatin Remodeling. <i>Journal of Biological Chemistry</i> , 2001, 276, 12636-12644.	1.6	49

#	ARTICLE	IF	CITATIONS
73	Transcriptome-wide target profiling of RNA cytosine methyltransferases using the mechanism-based enrichment procedure Aza-IP. <i>Nature Protocols</i> , 2014, 9, 337-361.	5.5	49
74	Chromatin architecture transitions from zebrafish sperm through early embryogenesis. <i>Genome Research</i> , 2021, 31, 981-994.	2.4	48
75	Reintroducing domesticated wild mice to sociality induces adaptive transgenerational effects on MUP expression. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 19848-19853.	3.3	47
76	Single-cell analysis of human testis aging and correlation with elevated body mass index. <i>Developmental Cell</i> , 2022, 57, 1160-1176.e5.	3.1	47
77	SnapShot: Chromatin Remodeling:SWI/SNF. <i>Cell</i> , 2011, 144, 310-310.e1.	13.5	42
78	PP4 dephosphorylates Maf1 to couple multiple stress conditions to RNA polymerase III repression. <i>EMBO Journal</i> , 2012, 31, 1440-1452.	3.5	39
79	Spreading of Sir3 protein in cells with severe histone H3 hypoacetylation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 7551-7556.	3.3	38
80	CTCF looping is established during gastrulation in medaka embryos. <i>Genome Research</i> , 2021, 31, 968-980.	2.4	37
81	Mechanisms for Nucleosome Movement by ATP-dependent Chromatin Remodeling Complexes. , 2006, 41, 127-148.		36
82	HDAC1,2 inhibition impairs EZH2- and BBAP- mediated DNA repair to overcome chemoresistance in EZH2 gain-of-function mutant diffuse large B-cell lymphoma. <i>Oncotarget</i> , 2015, 6, 4863-4887.	0.8	35
83	Kinetic Model for the ATP-Dependent Translocation of <i>Saccharomyces cerevisiae</i> RSC along Double-Stranded DNA. <i>Biochemistry</i> , 2007, 46, 12416-12426.	1.2	32
84	RNA Polymerase III Transcriptomes in Human Embryonic Stem Cells and Induced Pluripotent Stem Cells, and Relationships with Pluripotency Transcription Factors. <i>PLoS ONE</i> , 2014, 9, e85648.	1.1	31
85	HTL1 Encodes a Novel Factor That Interacts with the RSC Chromatin Remodeling Complex in <i>Saccharomyces cerevisiae</i> . <i>Molecular and Cellular Biology</i> , 2002, 22, 8165-8174.	1.1	27
86	A Role for SMARCB1 in Synovial Sarcomagenesis Reveals That SS18 <sup>Δ</sup> SSX Induces Canonical BAF Destruction. <i>Cancer Discovery</i> , 2021, 11, 2620-2637.	7.7	26
87	Genome-Wide Dynamics of SAPHIRE, an Essential Complex for Gene Activation and Chromatin Boundaries. <i>Molecular and Cellular Biology</i> , 2007, 27, 4058-4069.	1.1	24
88	DNA Methylation Profiling in Zebrafish. <i>Methods in Cell Biology</i> , 2011, 104, 327-339.	0.5	23
89	Zinc-dependent Regulation of the <i>adh1</i> Antisense Transcript in Fission Yeast. <i>Journal of Biological Chemistry</i> , 2013, 288, 759-769.	1.6	21
90	Genome-wide reconstitution of chromatin transactions reveals that RSC preferentially disrupts H2AZ-containing nucleosomes. <i>Genome Research</i> , 2019, 29, 988-998.	2.4	21

#	ARTICLE	IF	CITATIONS
91	Cancer-Associated Gain-of-Function Mutations Activate a SWI/SNF-Family Regulatory Hub. <i>Molecular Cell</i> , 2020, 80, 712-725.e5.	4.5	20
92	Specialization of the chromatin remodeler RSC to mobilize partially-unwrapped nucleosomes. <i>ELife</i> , 2020, 9, .	2.8	18
93	Maintenance of spatial gene expression by Polycomb-mediated repression after formation of a vertebrate body plan. <i>Development (Cambridge)</i> , 2019, 146, .	1.2	13
94	Establishment of developmental gene silencing by ordered polycomb complex recruitment in early zebrafish embryos. <i>ELife</i> , 2022, 11, .	2.8	13
95	Developmentally Programmed Tankyrase Activity Upregulates $\beta$ -Catenin and Licenses Progression of Embryonic Genome Activation. <i>Developmental Cell</i> , 2020, 53, 545-560.e7.	3.1	12
96	Experimental Approaches for Target Profiling of RNA Cytosine Methyltransferases. <i>Methods in Enzymology</i> , 2015, 560, 273-296.	0.4	11
97	Allosteric Interactions of DNA and Nucleotides with <i>S. cerevisiae</i> RSC. <i>Biochemistry</i> , 2011, 50, 7881-7890.	1.2	10
98	Interaction of the Jhd2 Histone H3 Lys-4 Demethylase with Chromatin Is Controlled by Histone H2A Surfaces and Restricted by H2B Ubiquitination. <i>Journal of Biological Chemistry</i> , 2015, 290, 28760-28777.	1.6	10
99	Isolation and Enrichment of Spermatogonial Stem Cells From Human Testis Tissues. <i>Current Protocols in Stem Cell Biology</i> , 2019, 49, e77.	3.0	10
100	Chromatin Remodeling Complexes. , 2014, , 69-146.		7
101	Selective repression of SINE transcription by RNA polymerase III. <i>Mobile Genetic Elements</i> , 2015, 5, 86-91.	1.8	7
102	Antibody detection of translocations in Ewing sarcoma. <i>EMBO Molecular Medicine</i> , 2012, 4, 453-461.	3.3	5
103	Tet proteins enhance the developmental hourglass. <i>Nature Genetics</i> , 2016, 48, 345-347.	9.4	3