Gary Felsenfeld

List of Publications by Year
in descending order

92 papers	20,061 citations	20817 60 h-index	45317 90 g-index
93 all docs	93 docs citations	93 times ranked	12904 citing authors

#	Article	IF	Citations
1	Methylation of a CTCF-dependent boundary controls imprinted expression of the Igf2 gene. Nature, 2000, 405, 482-485.	27.8	1,575
2	The Protein CTCF Is Required for the Enhancer Blocking Activity of Vertebrate Insulators. Cell, 1999, 98, 387-396.	28.9	980
3	Controlling the double helix. Nature, 2003, 421, 448-453.	27.8	961
4	Chromatin as an essential part of the transcriptional mechanim. Nature, 1992, 355, 219-224.	27.8	938
5	A 5â€² element of the chicken Î²-globin domain serves as an insulator in human erythroid cells and protects against position effect in Drosophila. Cell, 1993, 74, 505-514.	28.9	856
6	H3.3/H2A.Z double variantâ€“containing nucleosomes mark 'nucleosome-free regions' of active promoters and other regulatory regions. Nature Genetics, 2009, 41, 941-945.	21.4	679
7	Chromatin. Nature, 1978, 271, 115-122.	27.8	650
8	The erythroid-specific transcription factor eryf1: A new finger protein. Cell, 1989, 58, 877-885.	28.9	626
9	Insulators: exploiting transcriptional and epigenetic mechanisms. Nature Reviews Genetics, 2006, 7, 703-713.	16.3	573
10	Correlation Between Histone Lysine Methylation and Developmental Changes at the Chicken Î²-Globin Locus. Science, 2001, 293, 2453-2455.	12.6	561
11	Insulators: many functions, many mechanisms. Genes and Development, 2002, 16, 271-288.	5.9	553
12	Nucleosome stability mediated by histone variants H3.3 and H2A.Z. Genes and Development, 2007, 21, 1519-1529.	5.9	468
13	CTCF Tethers an Insulator to Subnuclear Sites, Suggesting Shared Insulator Mechanisms across Species. Molecular Cell, 2004, 13, 291-298.	9.7	457
14	Studies on the formation of two- and three-stranded polyribonucleotides. Biochimica Et Biophysica Acta, 1957, 26, 457-468.	1.3	402
15	The organization of histones and DNA in chromatin: Evidence for an arginine-rich histone kernel. Cell, 1976, 8, 333-347.	28.9	401
16	We gather together: insulators and genome organization. Current Opinion in Genetics and Development, 2007, 17, 400-407.	3.3	367
17	A new procedure for purifying histone pairs H2A+H2B and H3+H4 from chromatin using hydroxylapatite. Nucleic Acids Research, 1979, 6, 689-696.	14.5	363
18	Insulators and Boundaries: Versatile Regulatory Elements in the Eukaryotic Genome. Science, 2001, 291, 447-450.	12.6	361

#	ARTICLE	IF	CITATIONS
19	Position-effect protection and enhancer blocking by the chicken Â-globin insulator are separable activities. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 6883-6888.	7.1	352
20	A study of polyadenylic acid at neutral pH. Journal of Molecular Biology, 1966, 15, 455-466.	4.2	305
21	Silencing of transgene transcription precedes methylation of promoter DNA and histone H3 lysine 9. EMBO Journal, 2004, 23, 138-149.	7.8	281
22	Interaction of specific nuclear factors with the nuclease-hypersensitive region of the chicken adult Î²-globin gene: Nature of the binding domain. Cell, 1985, 41, 21-30.	28.9	275
23	CTCF: making the right connections. Genes and Development, 2016, 30, 881-891.	5.9	258
24	The conversion of two-stranded poly (A + U) to, three-strand poly (A + 2U) and poly A by heat. Biopolymers, 1964, 2, 293-314.	2.4	255
25	Orientation of the nucleosome within the higher order structure of chromatin. Cell, 1980, 22, 87-96.	28.9	245
26	A histone octamer can step around a transcribing polymerase without leaving the template. Cell, 1994, 76, 371-382.	28.9	243
27	Higher order structure of chromatin: Orientation of nucleosomes within the 30 nm chromatin solenoid is independent of species and spacer length. Cell, 1983, 33, 831-841.	28.9	240
28	Recruitment of Histone Modifications by USF Proteins at a Vertebrate Barrier Element. Molecular Cell, 2004, 16, 453-463.	9.7	234
29	Mediation of CTCF transcriptional insulation by DEAD-box RNA-binding protein p68 and steroid receptor RNA activator SRA. Genes and Development, 2010, 24, 2543-2555.	5.9	231
30	Studies of the temperature-dependent conformation and phase separation of polyriboadenylic acid solutions at neutral pH. Journal of Molecular Biology, 1967, 30, 17-37.	4.2	217
31	Methylation and gene control. Nature, 1982, 296, 602-603.	27.8	211
32	Actinomycin binding to DNA: Mechanism and specificity. Journal of Molecular Biology, 1965, 11, 445-457.	4.2	206
33	Chromatin structure as probed by nucleases and proteases: Evidence for the central role of hitones H3 and H4. Cell, 1976, 9, 179-193.	28.9	206
34	Stopped at the border: boundaries and insulators. Current Opinion in Genetics and Development, 1999, 9, 191-198.	3.3	205
35	The solution structure of a specific GAGA factorâ€"DNA complex reveals a modular binding mode. Nature Structural Biology, 1997, 4, 122-132.	9.7	198
36	Methylation of histone H4 by arginine methyltransferase PRMT1 is essential in vivo for many subsequent histone modifications. Genes and Development, 2005, 19, 1885-1893.	5.9	198

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37	Conformation of polyribouridylic acid in solution. Journal of Molecular Biology, 1970, 50, 373-389.	4.2	195
38	Mechanism of Transcription Through the Nucleosome by Eukaryotic RNA Polymerase. Science, 1997, 278, 1960-1963.	12.6	188
39	Specific Sites in the C Terminus of CTCF Interact with the SA2 Subunit of the Cohesin Complex and Are Required for Cohesin-Dependent Insulation Activity. Molecular and Cellular Biology, 2011, 31, 2174-2183.	2.3	172
40	The barrier function of an insulator couples high histone acetylation levels with specific protection of promoter DNA from methylation. Genes and Development, 2002, 16, 1540-1554.	5.9	169
41	A nucleosome core is transferred out of the path of a transcribing polymerase. Cell, 1992, 71, 11-22.	28.9	164
42	Structure and evolution of a human erythroid transcription factor. Nature, 1990, 343, 92-96.	27.8	163
43	Conserved CTCF Insulator Elements Flank the Mouse and Human Î²-Globin Loci. Molecular and Cellular Biology, 2002, 22, 3820-3831.	2.3	161
44	Overcoming a nucleosomal barrier to transcription. Cell, 1995, 83, 19-27.	28.9	159
45	Supercoiling energy and nucleosome formation: the role of the arginine-rich histone kernel. Nucleic Acids Research, 1977, 4, 1159-1182.	14.5	158
46	An insulator element and condensed chromatin region separate the chicken Î²-globin locus from an independently regulated erythroid-specific folate receptor gene. EMBO Journal, 1999, 18, 4035-4048.	7.8	149
47	Structural and functional conservation at the boundaries of the chicken Î²-globin domain. EMBO Journal, 2000, 19, 2315-2322.	7.8	141
48	Critical DNA Binding Interactions of the Insulator Protein CTCF. Journal of Biological Chemistry, 2007, 282, 33336-33345.	3.4	139
49	Chromatin domains, insulators, and the regulation of gene expression. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2012, 1819, 644-651.	1.9	115
50	Site-independent expression of the chicken Î²A-globin gene in transgenic mice. Nature, 1990, 348, 749-752.	27.8	108
51	Antagonism between DNA hypermethylation and enhancer-blocking activity at the H19 DMD is uncovered by CpG mutations. Nature Genetics, 2004, 36, 883-888.	21.4	107
52	Interaction of spermine and DNA. Biopolymers, 1967, 5, 227-233.	2.4	106
53	VEZF1 Elements Mediate Protection from DNA Methylation. PLoS Genetics, 2010, 6, e1000804.	3.5	91
54	Histone hyperacetylation has little effect on the higher order folding of chromatin. Nucleic Acids Research, 1983, 11, 4065-4075.	14.5	87

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55	Temperature-dependent conformational transitions in poly(dG-dC) and poly(dG-m5dC). Biopolymers, 1985, 24, 289-300.	2.4	78
56	The Nature of the Nucleosomal Barrier to Transcription. Molecular Cell, 1999, 4, 377-386.	9.7	78
57	Distribution of histone H3.3 in hematopoietic cell lineages. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 574-579.	7.1	75
58	The Human Insulin Gene Displays Transcriptionally Active Epigenetic Marks in Islet-Derived Mesenchymal Precursor Cells in the Absence of Insulin Expression. Stem Cells, 2007, 25, 3223-3233.	3.2	75
59	The number of charge-charge interactions stabilizing the ends of nucleosome DNA. Nucleic Acids Research, 1980, 8, 2751-2770.	14.5	74
60	Hydrodynamic Studies on Defined Heterochromatin Fragments Support a 30-nm Fiber Having Six Nucleosomes per Turn. Journal of Molecular Biology, 2008, 376, 1417-1425.	4.2	70
61	Perturbation of nucleosome structure by the erythroid transcription factor GATA-1. Journal of Molecular Biology, 1998, 279, 529-544.	4.2	61
62	Association of the Long Non-coding RNA Steroid Receptor RNA Activator (SRA) with TrxG and PRC2 Complexes. PLoS Genetics, 2015, 11, e1005615.	3.5	58
63	The conformation of polyriboadenylic acid at low temperature and neutral pH. A single-stranded rodlike structure. Biopolymers, 1975, 14, 299-307.	2.4	56
64	An octamer of histones H3 and 114 forms a compact complex with DNA of nucleosome size. Nucleic Acids Research, 1978, 5, 4805-4818.	14.5	56
65	Mapping of INS promoter interactions reveals its role in long-range regulation of SYT8 transcription. Nature Structural and Molecular Biology, 2011, 18, 372-378.	8.2	55
66	Maintenance of a constitutive heterochromatin domain in vertebrates by a Dicer-dependent mechanism. Nature Cell Biology, 2010, 12, 94-99.	10.3	51
67	The human insulin gene is part of a large open chromatin domain specific for human islets. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 17419-17424.	7.1	49
68	Comparison of the folding of .beta.-globin and ovalbumin gene containing chromatin isolated from chicken oviduct and erythrocytes. Biochemistry, 1986, 25, 8010-8016.	2.5	40
69	DNAÎ‡RNA triple helix formation can function as a <i>cis</i> -acting regulatory mechanism at the human <i>Î²-globin</i> locus. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 6130-6139.	7.1	39
70	The Myc-associated zinc finger protein (MAZ) works together with CTCF to control cohesin positioning and genome organization. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	39
71	Physical Properties of a Genomic Condensed Chromatin Fragment. Journal of Molecular Biology, 2004, 336, 597-605.	4.2	38
72	Vezf1 regulates genomic DNA methylation through its effects on expression of DNA methyltransferase Dnmt3b. Genes and Development, 2008, 22, 2075-2084.	5.9	38

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73	Interactome mapping defines BRG1, a component of the SWI/SNF chromatin remodeling complex, as a new partner of the transcriptional regulator CTCF. Journal of Biological Chemistry, 2019, 294, 861-873.	3.4	38
74	Vezf1 protein binding sites genome-wide are associated with pausing of elongating RNA polymerase II. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 2370-2375.	7.1	35
75	Sodium valproate rescues expression of TRANK1 in iPSC-derived neural cells that carry a genetic variant associated with serious mental illness. Molecular Psychiatry, 2019, 24, 613-624.	7.9	34
76	Solubility and structure of domains of chicken erythrocyte chromatin containing transcriptionally competent and inactive genes. Biochemistry, 1985, 24, 1186-1193.	2.5	30
77	Mapping of long-range <i>INS</i> promoter interactions reveals a role for calcium-activated chloride channel ANO1 in insulin secretion. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 16760-16765.	7.1	26
78	In vitro incorporation of tritium into native DNA. Biopolymers, 1969, 8, 733-741.	2.4	25
79	CTCF Recruits Centromeric Protein CENP-E to the Pericentromeric/Centromeric Regions of Chromosomes through Unusual CTCF-Binding Sites. Cell Reports, 2015, 12, 1704-1714.	6.4	25
80	Developmental regulation of globin gene expression. Journal of Cell Science, 1992, 1992, 15-20.	2.0	21
81	Chromatin structure outside and inside the nucleus. Biopolymers, 2013, 99, 225-232.	2.4	20
82	Human Argonaute 2 Is Tethered to Ribosomal RNA through MicroRNA Interactions. Journal of Biological Chemistry, 2016, 291, 17919-17928.	3.4	20
83	<i>Insulin</i> promoter in human pancreatic Î² cells contacts diabetes susceptibility loci and regulates genes affecting insulin metabolism. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E4633-E4641.	7.1	19
84	The RNA helicases DDX5 and DDX17 facilitate neural differentiation of human pluripotent stem cells NTERA2. Life Sciences, 2022, 291, 120298.	4.3	9
85	Quantitative approaches to problems of eukaryotic gene expression. Biophysical Chemistry, 2002, 100, 607-613.	2.8	7
86	Physical chemistry of nucleic acids and their complexes. Biopolymers, 2013, 99, 910-915.	2.4	5
87	Large parental differences in chromatin organization in pancreatic beta cell line explaining diabetes susceptibility effects. Nature Communications, 2021, 12, 4338.	12.8	5
88	Induced pluripotency enables differentiation of human nullipotent embryonal carcinoma cells N2102Ep. Biochimica Et Biophysica Acta - Molecular Cell Research, 2014, 1843, 2611-2619.	4.1	4
89	Order from Chaos in the Nucleus. Molecular Cell, 2012, 48, 327-328.	9.7	3
90	USF1 Recruits hSET1 Complex and Is Important for Maintaining Active Chromatin Domains in the Î²-Globin Locus.. Blood, 2007, 110, 274-274.	1.4	1

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91	Regulation of Chromatin Looping and Transcription by PRMT1 Mediated H4R3 Methylation.. Blood, 2008, 112, 1864-1864.	1.4	0
92	CTCF protein recruits centromeric protein CENPâ€E to the centromeric regions through unusual CTCF binding sites. FASEB Journal, 2015, 29, 709.6.	0.5	0