Philippe Collas

List of Publications by Year
in descending order

116 papers	6,862 citations	57631 44 h-index	66788 78 g-index
122 all docs	122 docs citations	122 times ranked	9220 citing authors

#	Article	IF	Citations
1	Isolation and Transcription Profiling of Purified Uncultured Human Stromal Stem Cells: Alteration of Gene Expression after In Vitro Cell Culture. Molecular Biology of the Cell, 2005, 16, 1131-1141.	0.9	317
2	A rapid micro chromatin immunoprecipitation assay (ChIP). Nature Protocols, 2008, 3, 1032-1045.	5.5	259
3	Induction of Dedifferentiation, Genomewide Transcriptional Programming, and Epigenetic Reprogramming by Extracts of Carcinoma and Embryonic Stem Cells. Molecular Biology of the Cell, 2005, 16, 5719-5735.	0.9	258
4	Reprogramming fibroblasts to express T-cell functions using cell extracts. Nature Biotechnology, 2002, 20, 460-466.	9.4	236
5	The Current State of Chromatin Immunoprecipitation. Molecular Biotechnology, 2010, 45, 87-100.	1.3	224
6	Differentiation of human adipose tissue stem cells using extracts of rat cardiomyocytes. Biochemical and Biophysical Research Communications, 2004, 314, 420-427.	1.0	222
7	Browning of White Adipose Cells by Intermediate Metabolites: An Adaptive Mechanism to Alleviate Redox Pressure. Diabetes, 2014, 63, 3253-3265.	0.3	220
8	Epigenetic Reprogramming of OCT4 and NANOG Regulatory Regions by Embryonal Carcinoma Cell Extract. Molecular Biology of the Cell, 2007, 18, 1543-1553.	0.9	188
9	Prepatterning of Developmental Gene Expression by Modified Histones before Zygotic Genome Activation. Developmental Cell, 2011, 21, 993-1004.	3.1	188
10	Lamina-associated domains: peripheral matters and internal affairs. Genome Biology, 2020, 21, 85.	3.8	162
11	Chrom3D: three-dimensional genome modeling from Hi-C and nuclear lamin-genome contacts. Genome Biology, 2017, 18, 21.	3.8	159
12	Lamin A/C-promoter interactions specify chromatin stateâ€“dependent transcription outcomes. Genome Research, 2013, 23, 1580-1589.	2.4	157
13	Recruitment of Protein Phosphatase 1 to the Nuclear Envelope by a-Kinase Anchoring Protein Akap149 Is a Prerequisite for Nuclear Lamina Assembly. Journal of Cell Biology, 2000, 150, 1251-1262.	2.3	155
14	Highâ€resolution analysis of genetic stability of human adipose tissue stem cells cultured to senescence. Journal of Cellular and Molecular Medicine, 2008, 12, 553-563.	1.6	148
15	Q2ChIP, a Quick and Quantitative Chromatin Immunoprecipitation Assay, Unravels Epigenetic Dynamics of Developmentally Regulated Genes in Human Carcinoma Cells. Stem Cells, 2007, 25, 1037-1046.	1.4	137
16	Stable CpG Hypomethylation of Adipogenic Promoters in Freshly Isolated, Cultured, and Differentiated Mesenchymal Stem Cells from Adipose Tissue. Molecular Biology of the Cell, 2006, 17, 3543-3556.	0.9	132
17	Long-range interactions between topologically associating domains shape the four-dimensional genome during differentiation. Nature Genetics, 2019, 51, 835-843.	9.4	114
18	Enriched domain detector: a program for detection of wide genomic enrichment domains robust against local variations. Nucleic Acids Research, 2014, 42, e92-e92.	6.5	111

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19	Dynamics of adipogenic promoter DNA methylation during clonal culture of human adipose stem cells to senescence. BMC Cell Biology, 2007, 8, 18.	3.0	99
20	Mistargeting of B-Type Lamins at the End of Mitosis. Journal of Cell Biology, 2001, 153, 621-626.	2.3	91
21	Histone H3 Modifications Associated With Differentiation and Long-Term Culture of Mesenchymal Adipose Stem Cells. Stem Cells and Development, 2009, 18, 725-736.	1.1	91
22	Histone H3 Lysine 27 Methylation Asymmetry on Developmentally-Regulated Promoters Distinguish the First Two Lineages in Mouse Preimplantation Embryos. PLoS ONE, 2010, 5, e9150.	1.1	91
23	Chop it, ChIP it, check it: the current status of chromatin immunoprecipitation. Frontiers in Bioscience - Landmark, 2008, 13, 929.	3.0	91
24	Cell Extract-Derived Differentiation of Embryonic Stem Cells. Stem Cells, 2005, 23, 712-718.	1.4	87
25	Histone variant H3.3 provides the heterochromatic H3 lysine 9 tri-methylation mark at telomeres. Nucleic Acids Research, 2015, 43, gkv847.	6.5	79
26	Î¼ChIPâ€"a rapid micro chromatin immunoprecipitation assay for small cell samples and biopsies. Nucleic Acids Research, 2008, 36, e15.	6.5	78
27	Prepatterning of differentiation-driven nuclear lamin A/C-associated chromatin domains by GlcNAcylated histone H2B. Genome Research, 2015, 25, 1825-1835.	2.4	75
28	Unrestrained ESCRT-III drives micronuclear catastrophe and chromosome fragmentation. Nature Cell Biology, 2020, 22, 856-867.	4.6	75
29	Promoter DNA Methylation Patterns of Differentiated Cells Are Largely Programmed at the Progenitor Stage. Molecular Biology of the Cell, 2010, 21, 2066-2077.	0.9	72
30	Ribosomal DNA copy loss and repeat instability in ATRX-mutated cancers. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 4737-4742.	3.3	72
31	A Kinaseâ€"Anchoring Protein (Akap95) Recruits Human Chromosome-Associated Protein (Hcap-D2/Eg7) for Chromosome Condensation in Mitotic Extract. Journal of Cell Biology, 2000, 149, 531-536.	2.3	71
32	Distinct features of lamin A-interacting chromatin domains mapped by ChIP-sequencing from sonicated or micrococcal nuclease-digested chromatin. Nucleus, 2015, 6, 30-39.	0.6	71
33	Carcinogen susceptibility is regulated by genome architecture and predicts cancer mutagenesis. EMBO Journal, 2017, 36, 2829-2843.	3.5	71
34	The PML-associated protein DEK regulates the balance of H3.3 loading on chromatin and is important for telomere integrity. Genome Research, 2014, 24, 1584-1594.	2.4	63
35	A lipodystrophy-causing lamin A mutant alters conformation and epigenetic regulation of the anti-adipogenic MIR335 locus. Journal of Cell Biology, 2017, 216, 2731-2743.	2.3	62
36	Fishâ€™n ChIPs: Chromatin Immunoprecipitation in the Zebrafish Embryo. Methods in Molecular Biology, 2009, 567, 75-86.	0.4	61

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37	DAXX-dependent supply of soluble (H3.3â€“H4) dimers to PML bodies pending deposition into chromatin. Genome Research, 2013, 23, 440-451.	2.4	61
38	Genome-wide analysis of DNA methylation and gene expression patterns in purified, uncultured human liver cells and activated hepatic stellate cells. Oncotarget, 2015, 6, 26729-26745.	0.8	61
39	CpG Methylation Profiles of Endothelial Cell-Specific Gene Promoter Regions in Adipose Tissue Stem Cells Suggest Limited Differentiation Potential Toward the Endothelial Cell Lineage. Stem Cells, 2007, 25, 852-861.	1.4	60
40	The p.R482W substitution in A-type lamins deregulates SREBP1 activity in Dunnigan-type familial partial lipodystrophy. Human Molecular Genetics, 2015, 24, 2096-2109.	1.4	57
41	Programming differentiation potential in mesenchymal stem cells. Epigenetics, 2010, 5, 476-482.	1.3	56
42	PML protein organizes heterochromatin domains where it regulates histone H3.3 deposition by ATRX/DAXX. Genome Research, 2017, 27, 913-921.	2.4	52
43	Laminopathy-causing lamin A mutations reconfigure lamina-associated domains and local spatial chromatin conformation. Nucleus, 2018, 9, 216-226.	0.6	51
44	Teaching cells new tricks. Trends in Biotechnology, 2003, 21, 354-361.	4.9	50
45	Integrated transcriptomic, phenotypic, and functional study reveals tissue-specific immune properties of mesenchymal stromal cells. Stem Cells, 2020, 38, 146-159.	1.4	50
46	Cohesin facilitates zygotic genome activation in zebrafish. Development (Cambridge), 2018, 145, .	1.2	47
47	Computational 3D genome modeling using Chrom3D. Nature Protocols, 2018, 13, 1137-1152.	5.5	47
48	Closing the (nuclear) envelope on the genome: How nuclear lamins interact with promoters and modulate gene expression. BioEssays, 2014, 36, 75-83.	1.2	46
49	CHK1-driven histone H3.3 serine 31 phosphorylation is important for chromatin maintenance and cell survival in human ALT cancer cells. Nucleic Acids Research, 2015, 43, 2603-2614.	6.5	46
50	A quick and quantitative chromatin immunoprecipitation assay for small cell samples. Frontiers in Bioscience - Landmark, 2007, 12, 4925.	3.0	44
51	Normalization of RNA-Sequencing Data from Samples with Varying mRNA Levels. PLoS ONE, 2014, 9, e89158.	1.1	44
52	Chromatin Environment of Histone Variant H3.3 Revealed by Quantitative Imaging and Genome-scale Chromatin and DNA Immunoprecipitation. Molecular Biology of the Cell, 2010, 21, 1872-1884.	0.9	42
53	Functional Human Beige Adipocytes From Induced Pluripotent Stem Cells. Diabetes, 2017, 66, 1470-1478.	0.3	42
54	Epigenetic Marking of the Zebrafish Developmental Program. Current Topics in Developmental Biology, 2013, 104, 85-112.	1.0	40

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55	Programming the genome in embryonic and somatic stem cells. Journal of Cellular and Molecular Medicine, 2007, 11, 602-620.	1.6	38
56	Epigenetic reprogramming of nuclei using cell extracts. Stem Cell Reviews and Reports, 2006, 2, 309-317.	5.6	37
57	Inhibition of Endothelial NOTCH1 Signaling Attenuates Inflammation by Reducing Cytokine-Mediated Histone Acetylation at Inflammatory Enhancers. Arteriosclerosis, Thrombosis, and Vascular Biology, 2018, 38, 854-869.	1.1	37
58	Fast genomic Î¼ChIP-chip from 1,000 cells. Genome Biology, 2009, 10, R13.	13.9	35
59	Nuclear reprogramming in cellâ€“free extracts. Philosophical Transactions of the Royal Society B: Biological Sciences, 2003, 358, 1389-1395.	1.8	34
60	Long-term in vitro, cell-type-specific genome-wide reprogramming of gene expression. Experimental Cell Research, 2005, 309, 32-47.	1.2	34
61	Manifold Based Optimization for Single-Cell 3D Genome Reconstruction. PLoS Computational Biology, 2015, 11, e1004396.	1.5	34
62	The lipodystrophic hotspot lamin A p.R482W mutation deregulates the mesodermal inducer T/Brachyury and early vascular differentiation gene networks. Human Molecular Genetics, 2018, 27, 1447-1459.	1.4	34
63	Interplay of lamin A and lamin B LADs on the radial positioning of chromatin. Nucleus, 2019, 10, 7-20.	0.6	34
64	Regulation of anchoring of the RIIÎ± regulatory subunit of PKA to AKAP95 by threonine phosphorylation of RIIÎ±: implications for chromosome dynamics at mitosis. Journal of Cell Science, 2001, 114, 3255-3264.	1.2	34
65	Epigenetic states in stem cells. Biochimica Et Biophysica Acta - General Subjects, 2009, 1790, 900-905.	1.1	33
66	The State-of-the-Art of Chromatin Immunoprecipitation. Methods in Molecular Biology, 2009, 567, 1-25.	0.4	32
67	Histone modifications and mRNA expression in the inner cell mass and trophectoderm of bovine blastocysts. Epigenetics, 2013, 8, 281-289.	1.3	32
68	CDK1-mediated phosphorylation of the RIIÎ± regulatory subunit of PKA works as a molecular switch that promotes dissociation of RIIÎ± from centrosomes at mitosis. Journal of Cell Science, 2001, 114, 3243-3254.	1.2	32
69	Chromatin states of core pluripotency-associated genes in pluripotent, multipotent and differentiated cells. Biochemical and Biophysical Research Communications, 2010, 391, 762-767.	1.0	31
70	Differential regulation of maternal and paternal chromosome condensation in mitotic zygotes. Journal of Cell Science, 2002, 115, 2931-2940.	1.2	31
71	Epigenetic Regulation of Nestin Expression During Neurogenic Differentiation of Adipose Tissue Stem Cells. Stem Cells and Development, 2013, 22, 1042-1052.	1.1	30
72	Î¼ChIP: Chromatin Immunoprecipitation for Small Cell Numbers. Methods in Molecular Biology, 2009, 567, 59-74.	0.4	27

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73	Nuclear lamins. Nucleus, 2013, 4, 424-430.	0.6	27
74	Deregulation of Fragile X-related protein 1 by the lipodystrophic lamin A p.R482W mutation elicits a myogenic gene expression program in preadipocytes. Human Molecular Genetics, 2014, 23, 1151-1162.	1.4	27
75	Identification, cloning and characterization of a novel nuclear protein, HA95, homologous to A-kinase anchoring protein 95*. Biology of the Cell, 2000, 92, 27-37.	0.7	26
76	Embryo Aggregation in Pig Improves Cloning Efficiency and Embryo Quality. PLoS ONE, 2016, 11, e0146390.	1.1	26
77	Promoter-exon relationship of H3 lysine 9, 27, 36 and 79 methylation on pluripotency-associated genes. Biochemical and Biophysical Research Communications, 2010, 401, 611-617.	1.0	25
78	Epigenetic Basis for the Differentiation Potential of Mesenchymal and Embryonic Stem Cells. Transfusion Medicine and Hemotherapy, 2008, 35, 205-215.	0.7	23
79	Epigenetic priming of inflammatory response genes by high glucose in adipose progenitor cells. Biochemical and Biophysical Research Communications, 2015, 467, 979-986.	1.0	23
80	OPA1-anchored PKA phosphorylates perilipin 1 on S522 and S497 in adipocytes differentiated from human adipose stem cells. Molecular Biology of the Cell, 2018, 29, 1487-1501.	0.9	22
81	Nuclear Lamin B1 Interactions With Chromatin During the Circadian Cycle Are Uncoupled From Periodic Gene Expression. Frontiers in Genetics, 2019, 10, 917.	1.1	21
82	On the way to reprogramming cells to pluripotency using cell-free extracts. Reproductive BioMedicine Online, 2006, 12, 762-770.	1.1	19
83	Sensitive on-chip quantitative real-time PCR performed on an adaptable and robust platform. Biomedical Microdevices, 2008, 10, 769-776.	1.4	19
84	H3.Y discriminates between HIRA and DAXX chaperone complexes and reveals unexpected insights into human DAXX-H3.3-H4 binding and deposition requirements. Nucleic Acids Research, 2017, 45, 5691-5706.	6.5	19
85	The specific alteration of histone methylation profiles by DZNep during early zebrafish development. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2014, 1839, 1307-1315.	0.9	18
86	H3K27me3 Does Not Orchestrate the Expression of Lineage-Specific Markers in hESC-Derived Hepatocytes InÂVitro. Stem Cell Reports, 2016, 7, 192-206.	2.3	18
87	Novel Approaches to Epigenetic Reprogramming of Somatic Cells. Cloning and Stem Cells, 2007, 9, 26-32.	2.6	17
88	Compromised Telomeric Heterochromatin Promotes ALTernative Lengthening of Telomeres. Trends in Cancer, 2016, 2, 114-116.	3.8	17
89	Finding Friends in the Crowd: Three-Dimensional Cliques of Topological Genomic Domains. Frontiers in Genetics, 2019, 10, 602.	1.1	17
90	Persistence of Collagen Type II Synthesis and Secretion in Rapidly Proliferating Human Articular ChondrocytesIn Vitro. Tissue Engineering - Part A, 2008, 14, 1999-2007.	1.6	16

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91	4D nucleomes in single cells: what can computational modeling reveal about spatial chromatin conformation?. Genome Biology, 2016, 17, 54.	3.8	16
92	Sperm chromatin integrity and DNA methylation in Norwegian Red bulls of contrasting fertility. Molecular Reproduction and Development, 2021, 88, 187-200.	1.0	15
93	Lamin A/C deficiency in CD4⁺ Tâ€cells enhances regulatory Tâ€cells and prevents inflammatory bowel disease. Journal of Pathology, 2019, 249, 509-522.	2.1	12
94	Histone H3.3 phosphorylation promotes heterochromatin formation by inhibiting H3K9/K36 histone demethylase. Nucleic Acids Research, 2022, 50, 4500-4514.	6.5	12
95	Restructuring of Lamina-Associated Domains in Senescence and Cancer. Cells, 2022, 11, 1846.	1.8	12
96	A hyper-dynamic nature of bivalent promoter states underlies coordinated developmental gene expression modules. BMC Genomics, 2014, 15, 1186.	1.2	11
97	Mapping Nuclear Lamin-Genome Interactions by Chromatin Immunoprecipitation of Nuclear Lamins. Methods in Molecular Biology, 2016, 1411, 315-324.	0.4	11
98	AKAP95 interacts with nucleoporin TPR in mitosis and is important for the spindle assembly checkpoint. Cell Cycle, 2017, 16, 947-956.	1.3	10
99	Local euchromatin enrichment in lamina-associated domains anticipates their repositioning in the adipogenic lineage. Genome Biology, 2022, 23, 91.	3.8	10
100	A Chromatin Immunoprecipitation Protocol for Small Cell Numbers. Methods in Molecular Biology, 2011, 791, 179-193.	0.4	9
101	Gene-Gun-Mediated Transfer of Reporter Genes to Somatic Zebrafish (Danio rerio) Tissues. Marine Biotechnology, 2000, 2, 293-300.	1.1	8
102	TAD cliques predict key features of chromatin organization. BMC Genomics, 2021, 22, 499.	1.2	8
103	Proteomics Analysis of Epithelial Cells Reprogrammed in Cell-free Extract. Molecular and Cellular Proteomics, 2009, 8, 1401-1412.	2.5	7
104	Localized Movement and Levels of 53BP1 Protein Are Changed by Î³â€irradiation in PML Deficient Cells. Journal of Cellular Biochemistry, 2016, 117, 2583-2596.	1.2	7
105	Physical constraints in polymer modeling of chromatin associations with the nuclear periphery at kilobase scale. Nucleus, 2021, 12, 6-20.	0.6	7
106	STAMP2 is required for human adipose-derived stem cell differentiation and adipocyte-facilitated prostate cancer growth in vivo. Oncotarget, 2017, 8, 91817-91827.	0.8	7
107	Biology and Model Predictions of the Dynamics and Heterogeneity of Chromatin-Nuclear Lamina Interactions. Frontiers in Cell and Developmental Biology, 2022, 10, .	1.8	7
108	TLR9 stimulation of B-cells induces transcription of p53 and prevents spontaneous and irradiation-induced cell death independent of DNA damage responses. Implications for Common variable immunodeficiency. PLoS ONE, 2017, 12, e0185708.	1.1	6

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109	Aâ€kinase anchoring protein <scp>AKAP</scp>95 is a novel regulator of ribosomal <scp>RNA</scp> synthesis. FEBS Journal, 2016, 283, 757-770.	2.2	5
110	PML modulates H3.3 targeting to telomeric and centromeric repeats in mouse fibroblasts. Biochemical and Biophysical Research Communications, 2019, 511, 882-888.	1.0	5
111	DNA-containing extracellular 50-nm particles in the ileal Peyer's patch of sheep. European Journal of Cell Biology, 2002, 81, 69-76.	1.6	4
112	Lamin A, Chromatin and FPLD2: Not Just a Peripheral MÃ©nage-Ã-Trois. Frontiers in Cell and Developmental Biology, 2018, 6, 73.	1.8	3
113	Modeling the 3D Genome Using Hi-C and Nuclear Lamin-Genome Contacts. Methods in Molecular Biology, 2022, 2301, 337-352.	0.4	1
114	Epigenetic Basis for Differentiation Plasticity in Stem Cells. , 2009, , 257-268.		1
115	Transcription outcome of promoters enriched in histone variant H3.3 defined by positioning of H3.3 and local chromatin marks. Biochemical and Biophysical Research Communications, 2015, 460, 348-353.	1.0	0
116	Signalling to the nucleus via A-kinase anchoring proteins. Symposia of the Society for Experimental Biology, 2004, , 245-63.	0.0	0