Ana Pombo

List of Publications by Year in Descending Order

95 papers	8,455 citations	43 h-index	91 g-index
109 ext. papers	10,078 ext. citations	11.8 avg, IF	6.19 L-index

#	Paper	IF	Citations
95	Single-cell-resolved dynamics of chromatin architecture delineate cell and regulatory states in zebrafish embryos. *Cell Genomics*, **2022**, 2, 100083		1
94	Cell-type specialization is encoded by specific chromatin topologies. *Nature*, **2021**, 599, 684-691	50.4	10
93	The dynamics of chromatin architecture in brain development and function. *Current Opinion in Genetics and Development*, **2021**, 67, 84-93	4.9	9
92	Altered nuclear architecture in blood cells from Huntington's disease patients. *Neurological Sciences*, **2021**, 1	3.5	0
91	Comparison of the Hi-C, GAM and SPRITE methods using polymer models of chromatin. *Nature Methods*, **2021**, 18, 482-490	21.6	12
90	Evolving methodologies and concepts in 4D nucleome research. *Current Opinion in Cell Biology*, **2020**, 64, 105-111	9	4
89	Methods for mapping 3D chromosome architecture. *Nature Reviews Genetics*, **2020**, 21, 207-226	30.1	174
88	LifeTime and improving European healthcare through cell-based interceptive medicine. *Nature*, **2020**, 587, 377-386	50.4	56
87	Inference of chromosome 3D structures from GAM data by a physics computational approach. *Methods*, **2020**, 181-182, 70-79	4.6	6
86	R-Loops Enhance Polycomb Repression at a Subset of Developmental Regulator Genes. *Molecular Cell*, **2019**, 73, 930-945.e4	17.6	41
85	Polymer physics predicts the effects of structural variants on chromatin architecture. *Nature Genetics*, **2018**, 50, 662-667	36.3	105
84	Challenges and guidelines toward 4D nucleome data and model standards. *Nature Genetics*, **2018**, 50, 1352-1358	36.3	29
83	A Finer Print Than TADs: PRC1-Mediated Domains. *Molecular Cell*, **2017**, 65, 373-375	17.6	1
82	Complex multi-enhancer contacts captured by genome architecture mapping. *Nature*, **2017**, 543, 519-524	50.4	356
81	Active and poised promoter states drive folding of the extended HoxB locus in mouse embryonic stem cells. *Nature Structural and Molecular Biology*, **2017**, 24, 515-524	17.6	61
80	Maternal immune activation results in complex microglial transcriptome signature in the adult offspring that is reversed by minocycline treatment. *Translational Psychiatry*, **2017**, 7, e1120	8.6	118
79	Keep Them Close: PRC2 Poises Enhancer-Promoter Interactions at Anterior Neuronal Genes. *Cell Stem Cell*, **2017**, 20, 573-575	18	4

78	RNA polymerase II primes Polycomb-repressed developmental genes throughout terminal neuronal differentiation. *Molecular Systems Biology*, **2017**, 13, 946	12.2	27
77	FANTOM5 CAGE profiles of human and mouse samples. *Scientific Data*, **2017**, 4, 170112	8.2	88
76	Cell cycle: Continuous chromatin changes. *Nature*, **2017**, 547, 34-35	50.4	9
75	Flipping between Polycomb repressed and active transcriptional states introduces noise in gene expression. *Nature Communications*, **2017**, 8, 36	17.4	43
74	On the Nature of Chromatin 3D Organization **2017**, 191-201		
73	Mechanical regulation of transcription controls Polycomb-mediated gene silencing during lineage commitment. *Nature Cell Biology*, **2016**, 18, 864-75	23.4	241
72	Examining Topological Domain Influence on Enhancer Function. *Developmental Cell*, **2016**, 39, 523-524	10.2	2
71	Formation of new chromatin domains determines pathogenicity of genomic duplications. *Nature*, **2016**, 538, 265-269	50.4	396
70	Gene activation by metazoan enhancers: Diverse mechanisms stimulate distinct steps of transcription. *BioEssays*, **2016**, 38, 881-93	4.1	28
69	Three-dimensional genome architecture: players and mechanisms. *Nature Reviews Molecular Cell Biology*, **2015**, 16, 245-57	48.7	338
68	Polymer models of the organization of chromosomes in the nucleus of cells. *Modern Physics Letters B*, **2015**, 29, 1530003	1.6	7
67	Hierarchical folding and reorganization of chromosomes are linked to transcriptional changes in cellular differentiation. *Molecular Systems Biology*, **2015**, 11, 852	12.2	229
66	Transcribed enhancers lead waves of coordinated transcription in transitioning mammalian cells. *Science*, **2015**, 347, 1010-4	33.3	384
65	Methylation of RNA polymerase II non-consensus Lysine residues marks early transcription in mammalian cells. *ELife*, **2015**, 4,	8.9	32
64	Models of chromosome structure. *Current Opinion in Cell Biology*, **2014**, 28, 90-5	9	76
63	Physical mechanisms behind the large scale features of chromatin organization. *Transcription*, **2014**, 5, e28447	4.8	7
62	An H3K9/S10 methyl-phospho switch modulates Polycomb and Pol II binding at repressed genes during differentiation. *Molecular Biology of the Cell*, **2014**, 25, 904-15	3.5	29
61	Polymer physics, scaling and heterogeneity in the spatial organisation of chromosomes in the cell nucleus. *Soft Matter*, **2013**, 9, 8631	3.6	14

60	A model of the large-scale organization of chromatin. *Biochemical Society Transactions*, **2013**, 41, 508-12	5.1	17
59	A polymer model explains the complexity of large-scale chromatin folding. *Nucleus*, **2013**, 4, 267-73	3.9	29
58	Polymer models of chromatin organization. *Frontiers in Genetics*, **2013**, 4, 113	4.5	12
57	Proteomic analysis of mitotic RNA polymerase II reveals novel interactors and association with proteins dysfunctional in disease. *Molecular and Cellular Proteomics*, **2012**, 11, M111.011767	7.6	9
56	Polycomb associates genome-wide with a specific RNA polymerase II variant, and regulates metabolic genes in ESCs. *Cell Stem Cell*, **2012**, 10, 157-70	18	221
55	Complexity of chromatin folding is captured by the strings and binders switch model. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 16173-8	11.5	343
54	Mean Expression of the X-Chromosome is Associated with Neuronal Density. *Frontiers in Neuroscience*, **2012**, 6, 161	5.1	9
53	Polycomb targets seek closest neighbours. *PLoS Genetics*, **2011**, 7, e1002031	6	1
52	Nuclear cell biology. *Molecular Biology of the Cell*, **2011**, 22, 722	3.5	
51	Jarid2 is a PRC2 component in embryonic stem cells required for multi-lineage differentiation and recruitment of PRC1 and RNA Polymerase II to developmental regulators. *Nature Cell Biology*, **2010**, 12, 618-24	23.4	240
50	Nuclear architecture in stem cells. *Advances in Experimental Medicine and Biology*, **2010**, 695, 14-25	3.6	2
49	Ring1B and Suv39h1 delineate distinct chromatin states at bivalent genes during early mouse lineage commitment. *Development (Cambridge)*, **2010**, 137, 2483-92	6.6	90
48	Measurement of replication structures at the nanometer scale using super-resolution light microscopy. *Nucleic Acids Research*, **2010**, 38, e8	20.1	87
47	Poised transcription factories prime silent uPA gene prior to activation. *PLoS Biology*, **2010**, 8, e1000270	9.7	70
46	Short RNAs are transcribed from repressed polycomb target genes and interact with polycomb repressive complex-2. *Molecular Cell*, **2010**, 38, 675-88	17.6	312
45	Gene positioning. *Cold Spring Harbor Perspectives in Biology*, **2010**, 2, a000588	10.2	54
44	CryoFISH: fluorescence in situ hybridization on ultrathin cryosections. *Methods in Molecular Biology*, **2010**, 659, 219-30	1.4	3
43	Mechanisms regulating S phase progression in mammalian cells. *Frontiers in Bioscience - Landmark*, **2009**, 14, 4199-213	2.8	7

42	The molecular basis for stability of heterochromatin-mediated silencing in mammals. *Epigenetics and Chromatin*, **2009**, 2, 14	5.8	16
41	Modifications of RNA polymerase II are pivotal in regulating gene expression states. *EMBO Reports*, **2009**, 10, 1213-9	6.5	116
40	3D chromatin regulation of Sonic hedgehog in the limb buds. *Developmental Cell*, **2009**, 16, 9-11	10.2	6
39	Eukaryotic gene regulation in three dimensions and its impact on genome evolution. *Current Opinion in Genetics and Development*, **2008**, 18, 571-82	4.9	39
38	Transcription and chromatin organization of a housekeeping gene cluster containing an integrated beta-globin locus control region. *PLoS Genetics*, **2008**, 4, e1000016	6	63
37	Changes in chromosome organization during PHA-activation of resting human lymphocytes measured by cryo-FISH. *Chromosome Research*, **2008**, 16, 413-26	4.4	34
36	Ring1-mediated ubiquitination of H2A restrains poised RNA polymerase II at bivalent genes in mouse ES cells. *Nature Cell Biology*, **2007**, 9, 1428-35	23.4	534
35	Chromosome organization: new facts, new models. *Trends in Cell Biology*, **2007**, 17, 127-34	18.3	82
34	Advances in imaging the interphase nucleus using thin cryosections. *Histochemistry and Cell Biology*, **2007**, 128, 97-104	2.4	11
33	Desmin immunolocalisation in autosomal dominant Emery-Dreifuss muscular dystrophy. *Neuromuscular Disorders*, **2007**, 17, 297-305	2.9	7
32	Functional organisation of the genome during interphase. *Current Opinion in Genetics and Development*, **2007**, 17, 451-5	4.9	45
31	Splicing speckles are not reservoirs of RNA polymerase II, but contain an inactive form, phosphorylated on serine2 residues of the C-terminal domain. *Molecular Biology of the Cell*, **2006**, 17, 1723-33	3.5	78
30	Distribution of different phosphorylated forms of RNA polymerase II in relation to Cajal and PML bodies in human cells: an ultrastructural study. *Histochemistry and Cell Biology*, **2006**, 125, 21-31	2.4	30
29	Intermingling of chromosome territories in interphase suggests role in translocations and transcription-dependent associations. *PLoS Biology*, **2006**, 4, e138	9.7	511
28	Variant histone H3.3 marks promoters of transcriptionally active genes during mammalian cell division. *EMBO Reports*, **2005**, 6, 354-60	6.5	132
27	Functional analysis of Vif protein shows less restriction of human immunodeficiency virus type 2 by APOBEC3G. *Journal of Virology*, **2005**, 79, 823-33	6.6	39
26	Measuring the size of biological nanostructures with spatially modulated illumination microscopy. *Molecular Biology of the Cell*, **2004**, 15, 2449-55	3.5	47
25	CD8 alpha is an activation marker for a subset of peripheral CD4 T cells. *European Journal of Immunology*, **2004**, 34, 1262-71	6.1	18

24	Fixation-induced redistribution of hyperphosphorylated RNA polymerase II in the nucleus of human cells. *Experimental Cell Research*, **2004**, 295, 460-8	4.2	48
23	Genome function and nuclear architecture: from gene expression to nanoscience. *Genome Research*, **2003**, 13, 1029-41	9.7	56
22	Transcription factories: quantitative studies of nanostructures in the mammalian nucleus. *Chromosome Research*, **2003**, 11, 461-70	4.4	36
21	Cellular genomics: which genes are transcribed, when and where?. *Trends in Biochemical Sciences*, **2003**, 28, 6-9	10.3	5
20	Interaction of proteins with promoter elements of the human U2 snRNA genes in vivo. *Gene*, **2003**, 315, 103-12	3.8	14
19	Correlative fluorescence and electron microscopy on ultrathin cryosections: bridging the resolution gap. *Journal of Histochemistry and Cytochemistry*, **2001**, 49, 803-8	3.4	73
18	Phenotypic analysis of peripheral CD4+ CD8+ T cells in the rat. *Immunology*, **2000**, 101, 178-84	7.8	21
17	The balance sheet for transcription: an analysis of nuclear RNA metabolism in mammalian cells. *FASEB Journal*, **2000**, 14, 242-254	0.9	124
16	Specialized Transcription Factories within Mammalian Nuclei. *Critical Reviews in Eukaryotic Gene Expression*, **2000**, 10, 10	1.3	39
15	Bridging the resolution gap: Imaging the same transcription factories in cryosections by light and electron microscopy. *Journal of Histochemistry and Cytochemistry*, **1999**, 47, 471-80	3.4	49
14	Localization of a putative transcriptional regulator (ATRX) at pericentromeric heterochromatin and the short arms of acrocentric chromosomes. *Proceedings of the National Academy of Sciences of the United States of America*, **1999**, 96, 13983-8	11.5	208
13	Regional specialization in human nuclei: visualization of discrete sites of transcription by RNA polymerase III. *EMBO Journal*, **1999**, 18, 2241-53	13	199
12	Regional and temporal specialization in the nucleus: a transcriptionally-active nuclear domain rich in PTF, Oct1 and PIKA antigens associates with specific chromosomes early in the cell cycle. *EMBO Journal*, **1998**, 17, 1768-78	13	105
11	Replicon clusters are stable units of chromosome structure: evidence that nuclear organization contributes to the efficient activation and propagation of S phase in human cells. *Journal of Cell Biology*, **1998**, 140, 1285-95	7.3	636
10	Dendritic cells interact directly with naive B lymphocytes to transfer antigen and initiate class switching in a primary T-dependent response. *Journal of Immunology*, **1998**, 161, 1313-9	5.3	327
9	The topology of transcription by immobilized polymerases. *Experimental Cell Research*, **1996**, 229, 167-73	4.2	51
8	The localization of sites containing nascent RNA and splicing factors. *Experimental Cell Research*, **1996**, 229, 201-3	4.2	44
7	Interactions of adenovirus with the nucleus of the host cell. *Reviews in Medical Virology*, **1995**, 5, 213-218	11.7	2

6	On the structure of replication and transcription factories. *Journal of Cell Science*, **1995**, 19, 59-65	5.3	14
5	Adenovirus replication and transcription sites are spatially separated in the nucleus of infected cells.. *EMBO Journal*, **1994**, 13, 5075-5085	13	114
4	Multiplex-GAM: genome-wide identification of chromatin contacts yields insights not captured by Hi-C		6
3	Cell-type specialization in the brain is encoded by specific long-range chromatin topologies		3
2	Comparison of the Hi-C, GAM and SPRITE methods by use of polymer models of chromatin		3
1	Single-cell-resolved dynamics of chromatin architecture delineate cell and regulatory states in wildtype and cloche/npas4l mutant zebrafish embryos		1