Peter Cook

List of Publications by Year in Descending Order

111 papers	8,581 citations	49 h-index	92 g-index
121 ext. papers	9,482 ext. citations	10.6 avg, IF	6.35 L-index

#	Paper	IF	Citations
111	Predicting flows through microfluidic circuits with fluid walls. *Microsystems and Nanoengineering*, **2021**, 7, 93	7.7	0
110	Microfluidics on Standard Petri Dishes for Bioscientists.. *Small Methods*, **2021**, 5, e2100724	12.8	
109	Creating wounds in cell monolayers using micro-jets. *Biomicrofluidics*, **2021**, 15, 014108	3.2	2
108	Complex small-world regulatory networks emerge from the 3D organisation of the human genome. *Nature Communications*, **2021**, 12, 5756	17.4	1
107	Using Fluid Walls for Single-Cell Cloning Provides Assurance in Monoclonality. *SLAS Technology*, **2020**, 25, 267-275	3	4
106	Jet-Printing Microfluidic Devices on Demand. *Advanced Science*, **2020**, 7, 2001854	13.6	8
105	Raising fluid walls around living cells. *Science Advances*, **2019**, 5, eaav8002	14.3	14
104	Extrusion without a motor: a new take on the loop extrusion model of genome organization. *Nucleus*, **2018**, 9, 95-103	3.9	27
103	Shaping epigenetic memory via genomic bookmarking. *Nucleic Acids Research*, **2018**, 46, 83-93	20.1	36
102	Microfluidic chambers using fluid walls for cell biology. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E5926-E5933	11.5	29
101	Transcription-driven genome organization: a model for chromosome structure and the regulation of gene expression tested through simulations. *Nucleic Acids Research*, **2018**, 46, 9895-9906	20.1	59
100	Ephemeral Protein Binding to DNA Shapes Stable Nuclear Bodies and Chromatin Domains. *Biophysical Journal*, **2017**, 112, 1085-1093	2.9	40
99	Microfluidics with fluid walls. *Nature Communications*, **2017**, 8, 816	17.4	61
98	Nonequilibrium Chromosome Looping via Molecular Slip Links. *Physical Review Letters*, **2017**, 119, 138101	7.4	81
97	Binding of nuclear factor B to noncanonical consensus sites reveals its multimodal role during the early inflammatory response. *Genome Research*, **2016**, 26, 1478-1489	9.7	27
96	Simulating topological domains in human chromosomes with a fitting-free model. *Nucleus*, **2016**, 7, 453-461	3.9	5
95	Isolation of the protein and RNA content of active sites of transcription from mammalian cells. *Nature Protocols*, **2016**, 11, 553-65	18.8	10

94	Formation of droplet interface bilayers in a Teflon tube. *Scientific Reports*, **2016**, 6, 34355	4.9	5
93	Biocompatibility of fluids for multiphase drops-in-drops microfluidics. *Biomedical Microdevices*, **2016**, 18, 114	3.7	9
92	Super-resolution measurement of distance between transcription sites using RNA FISH with intronic probes. *Methods*, **2016**, 98, 150-157	4.6	2
91	Simulated binding of transcription factors to active and inactive regions folds human chromosomes into loops, rosettes and topological domains. *Nucleic Acids Research*, **2016**, 44, 3503-12	20.1	103
90	A simple model for DNA bridging proteins and bacterial or human genomes: bridging-induced attraction and genome compaction. *Journal of Physics Condensed Matter*, **2015**, 27, 064119	1.8	21
89	Why the activity of a gene depends on its neighbors. *Trends in Genetics*, **2015**, 31, 483-90	8.5	63
88	Exon Skipping Is Correlated with Exon Circularization. *Journal of Molecular Biology*, **2015**, 427, 2414-2417	6.5	228
87	Splicing of many human genes involves sites embedded within introns. *Nucleic Acids Research*, **2015**, 43, 4721-32	20.1	25
86	Dissecting the nascent human transcriptome by analysing the RNA content of transcription factories. *Nucleic Acids Research*, **2015**, 43, e95	20.1	22
85	Most human proteins made in both nucleus and cytoplasm turn over within minutes. *PLoS ONE*, **2014**, 9, e99346	3.7	22
84	"Dark matter" worlds of unstable RNA and protein. *Nucleus*, **2014**, 5, 281-6	3.9	16
83	TNF□ signalling primes chromatin for NF-B binding and induces rapid and widespread nucleosome repositioning. *Genome Biology*, **2014**, 15, 536	18.3	22
82	Nonspecific bridging-induced attraction drives clustering of DNA-binding proteins and genome organization. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, E3605-11	11.5	145
81	Multiscale spatial organization of RNA polymerase in Escherichia coli. *Biophysical Journal*, **2013**, 105, 172-81	2.9	135
80	Transcription factories, chromatin loops, and the dysregulation of gene expression in malignancy. *Seminars in Cancer Biology*, **2013**, 23, 65-71	12.7	34
79	Transcription factories: genome organization and gene regulation. *Chemical Reviews*, **2013**, 113, 8683-705	48.1	157
78	Promoter type influences transcriptional topography by targeting genes to distinct nucleoplasmic sites. *Journal of Cell Science*, **2013**, 126, 2052-9	5.3	11
77	Space exploration by the promoter of a long human gene during one transcription cycle. *Nucleic Acids Research*, **2013**, 41, 2216-27	20.1	21

76	TNF signals through specialized factories where responsive coding and miRNA genes are transcribed. *EMBO Journal*, **2012**, 31, 4404-14	13	93
75	Enhancers and silencers: an integrated and simple model for their function. *Epigenetics and Chromatin*, **2012**, 5, 1	5.8	87
74	Dynamic reconfiguration of long human genes during one transcription cycle. *Molecular and Cellular Biology*, **2012**, 32, 2738-47	4.8	32
73	Maximum precision closed-form solution for localizing diffraction-limited spots in noisy images. *Optics Express*, **2012**, 20, 18478-93	3.3	5
72	T7 RNA polymerase functions in vitro without clustering. *PLoS ONE*, **2012**, 7, e40207	3.7	2
71	The proteomes of transcription factories containing RNA polymerases I, II or III. *Nature Methods*, **2011**, 8, 963-8	21.6	67
70	Transcriptional Initiation: Frequency, Bursting, and Transcription Factories **2011**, 235-254		1
69	Non-specific (entropic) forces as major determinants of the structure of mammalian chromosomes. *Chromosome Research*, **2011**, 19, 53-61	4.4	26
68	Fixing the model for transcription: the DNA moves, not the polymerase. *Transcription*, **2011**, 2, 41-4	4.8	30
67	Active RNA polymerases: mobile or immobile molecular machines?. *PLoS Biology*, **2010**, 8, e1000419	9.7	76
66	A model for all genomes: the role of transcription factories. *Journal of Molecular Biology*, **2010**, 395, 1-10	6.5	190
65	Genome architecture and the role of transcription. *Current Opinion in Cell Biology*, **2010**, 22, 271-6	9	41
64	A wave of nascent transcription on activated human genes. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 18357-61	11.5	129
63	Entropic organization of interphase chromosomes. *Journal of Cell Biology*, **2009**, 186, 825-34	7.3	119
62	The role of specialized transcription factories in chromosome pairing. *Biochimica Et Biophysica Acta - Molecular Cell Research*, **2008**, 1783, 2155-60	4.9	48
61	Transcription factories. *Biochemical Society Transactions*, **2008**, 36, 585-9	5.1	59
60	Similar active genes cluster in specialized transcription factories. *Journal of Cell Biology*, **2008**, 181, 615-23	7.3	122
59	RNA polymerase II activity is located on the surface of protein-rich transcription factories. *Journal of Cell Science*, **2008**, 121, 1999-2007	5.3	68

58	Confocal Fluorescence Imaging of Photosensitized DNA Denaturation in Cell Nuclei. *Photochemistry and Photobiology*, **2007**, 81, 960-969	3.6	2
57	Photobleaching reveals complex effects of inhibitors on transcribing RNA polymerase II in living cells. *Experimental Cell Research*, **2007**, 313, 3026-33	4.2	8
56	What are the molecular ties that maintain genomic loops?. *Trends in Genetics*, **2007**, 23, 126-33	8.5	90
55	Dynamic Chromatin Loops and the Regulation of Gene Expression **2007**, 177-195		
54	Modeling a self-avoiding chromatin loop: relation to the packing problem, action-at-a-distance, and nuclear context. *Structure*, **2006**, 14, 197-204	5.2	18
53	Many expressed genes in bacteria and yeast are transcribed only once per cell cycle. *FASEB Journal*, **2006**, 20, 1721-3	0.9	37
52	The depletion attraction: an underappreciated force driving cellular organization. *Journal of Cell Biology*, **2006**, 175, 681-6	7.3	261
51	Depletion effects and loop formation in self-avoiding polymers. *Physical Review Letters*, **2006**, 97, 178302	7.4	49
50	A conserved organization of transcription during embryonic stem cell differentiation and in cells with high C value. *Molecular Biology of the Cell*, **2006**, 17, 2910-20	3.5	49
49	Entropy-driven genome organization. *Biophysical Journal*, **2006**, 90, 3712-21	2.9	138
48	Transcription factories: structures conserved during differentiation and evolution. *Biochemical Society Transactions*, **2006**, 34, 1133-7	5.1	47
47	Specialized transcription factories. *Biochemical Society Symposia*, **2006**, 67-75		43
46	Different populations of RNA polymerase II in living mammalian cells. *Chromosome Research*, **2005**, 13, 135-44	4.4	45
45	Molecular cross-talk between the transcription, translation, and nonsense-mediated decay machineries. *Journal of Cell Science*, **2004**, 117, 899-906	5.3	51
44	The case for nuclear translation. *Journal of Cell Science*, **2004**, 117, 5713-20	5.3	44
43	Nongenic transcription, gene regulation and action at a distance. *Journal of Cell Science*, **2003**, 116, 4483-91	5.3	59
42	Applying microscopy to the analysis of nuclear structure and function. *Methods*, **2003**, 29, 131-41	4.6	7
41	The interdependence of nuclear structure and function. *Current Opinion in Cell Biology*, **2002**, 14, 780-5	9	20

40	Predicting three-dimensional genome structure from transcriptional activity. *Nature Genetics*, **2002**, 32, 347-52	36.3	134
39	The transcription cycle of RNA polymerase II in living cells. *Journal of Cell Biology*, **2002**, 159, 777-82	7.3	215
38	Kinetics of core histones in living human cells: little exchange of H3 and H4 and some rapid exchange of H2B. *Journal of Cell Biology*, **2001**, 153, 1341-53	7.3	547
37	Correlative fluorescence and electron microscopy on ultrathin cryosections: bridging the resolution gap. *Journal of Histochemistry and Cytochemistry*, **2001**, 49, 803-8	3.4	73
36	Coupled transcription and translation within nuclei of mammalian cells. *Science*, **2001**, 293, 1139-42	33.3	313
35	A mutation in the largest (catalytic) subunit of RNA polymerase II and its relation to the arrest of the cell cycle in G(1) phase. *Gene*, **2001**, 274, 77-81	3.8	15
34	Stable correction of a genetic deficiency in human cells by an episome carrying a 115 kb genomic transgene. *Nature Biotechnology*, **2000**, 18, 1311-4	44.5	68
33	Isolation and characterization of monoclonal antibodies directed against subunits of human RNA polymerases I, II, and III. *Experimental Cell Research*, **2000**, 254, 163-72	4.2	19
32	Direct imaging of DNA in living cells reveals the dynamics of chromosome formation. *Journal of Cell Biology*, **1999**, 144, 813-21	7.3	149
31	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
30	Regional specialization in human nuclei: visualization of discrete sites of transcription by RNA polymerase III. *EMBO Journal*, **1999**, 18, 2241-53	13	199
29	The organization of replication and transcription. *Science*, **1999**, 284, 1790-5	33.3	636
28	Quantitation of RNA polymerase II and its transcription factors in an HeLa cell: little soluble holoenzyme but significant amounts of polymerases attached to the nuclear substructure. *Molecular and Cellular Biology*, **1999**, 19, 5383-92	4.8	132
27	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
26	Numbers and organization of RNA polymerases, nascent transcripts, and transcription units in HeLa nuclei. *Molecular Biology of the Cell*, **1998**, 9, 1523-36	3.5	252
25	The size of sites containing SR proteins in human nuclei. Problems associated with characterizing small structures by immunogold labeling. *Journal of Histochemistry and Cytochemistry*, **1998**, 46, 985-92	3.4	20
24	The transcriptional basis of chromosome pairing. *Journal of Cell Science*, **1997**, 110 (Pt 9), 1033-40	5.3	34
23	4-Picoline-2,2$6$2"-terpyridine-platinum(II) - a potent intercalator of DNA. *FEBS Letters*, **1996**, 380, 73-8	3.8	83

22	The topology of transcription by immobilized polymerases. *Experimental Cell Research*, **1996**, 229, 167-73	4.2	51
21	The localization of sites containing nascent RNA and splicing factors. *Experimental Cell Research*, **1996**, 229, 201-3	4.2	44
20	Sequences attaching loops of nuclear and mitochondrial DNA to underlying structures in human cells: the role of transcription units. *Nucleic Acids Research*, **1996**, 24, 1212-9	20.1	65
19	A chromomeric model for nuclear and chromosome structure. *Journal of Cell Science*, **1995**, 108 (Pt 9), 2927-35	5.3	31
18	RNA polymerase: structural determinant of the chromatin loop and the chromosome. *BioEssays*, **1994**, 16, 425-30	4.1	48
17	Visualization of replication factories attached to nucleoskeleton. *Cell*, **1993**, 73, 361-73	56.2	417
16	A model for reverse transcription by a dimeric enzyme. *Journal of General Virology*, **1993**, 74 (Pt 4), 691-7	4.9	9
15	Visualization of focal sites of transcription within human nuclei. *EMBO Journal*, **1993**, 12, 1059-65	13	242
14	Transcription by an immobilized RNA polymerase from bacteriophage T7 and the topology of transcription. *Nucleic Acids Research*, **1992**, 20, 3591-8	20.1	17
13	The nucleoskeleton and the topology of replication. *Cell*, **1991**, 66, 627-35	56.2	197
12	Active RNA polymerase I is fixed within the nucleus of HeLa cells.. *EMBO Journal*, **1990**, 9, 2207-2214	13	40
11	How mobile are active RNA polymerases?. *Journal of Cell Science*, **1990**, 96 (Pt 2), 189-92	5.3	1
10	The nucleoskeleton and the topology of transcription. *FEBS Journal*, **1989**, 185, 487-501		87
9	Replication and transcription depend on attachment of DNA to the nuclear cage. *Journal of Cell Science*, **1984**, 1, 59-79	5.3	59
8	RNA is synthesized at the nuclear cage. *Nature*, **1981**, 292, 552-5	50.4	231
7	Spectrofluorometric measurement of the binding of ethidium to superhelical DNA from cell nuclei. *FEBS Journal*, **1978**, 84, 465-77		82
6	The superhelical density of nuclear DNA from human cells. *FEBS Journal*, **1977**, 74, 527-31		18
5	Transcription of superhelical DNA from cell nuclei. *FEBS Journal*, **1977**, 76, 63-78		21

4	Conformational constraints in nuclear DNA. *Journal of Cell Science*, **1976**, 22, 287-302	5.3	183
3	ON THE INHERITANCE OF DIFFERENTIATED TRAITS. *Biological Reviews*, **1974**, 49, 51-84	13.5	18
2	Characterization of hypoxanthine-guanine phosphoribosyl transferase in man--mouse somatic cell hybrids by an improved electrophoretic method. *Biochemical Genetics*, **1971**, 5, 91-9	2.4	49
1	Species Specificity of an Enzyme Determined by an Erythrocyte Nucleus in an Interspecific Hybrid Cell. *Journal of Cell Science*, **1970**, 7, 1-3	5.3	19