Peter Cook

List of Publications by Year
in descending order

112 papers	10,230 citations	34105 52 h-index	36028 97 g-index
121 all docs	121 docs citations	121 times ranked	7759 citing authors

#	Article	IF	Citations
1	Reconfigurable Microfluidic Circuits for Isolating and Retrieving Cells of Interest. ACS Applied Materials & Interfaces, 2022, 14, 25209-25219.	8.0	1
2	Creating wounds in cell monolayers using micro-jets. Biomicrofluidics, 2021, 15, 014108.	2.4	4
3	Complex small-world regulatory networks emerge from the 3D organisation of the human genome. Nature Communications, 2021, 12, 5756.	12.8	15
4	Microfluidics on Standard Petri Dishes for Bioscientists. Small Methods, 2021, 5, 2100724.	8.6	4
5	Predicting flows through microfluidic circuits with fluid walls. Microsystems and Nanoengineering, 2021, 7, 93.	7.0	9
6	Using Fluid Walls for Single-Cell Cloning Provides Assurance in Monoclonality. SLAS Technology, 2020, 25, 267-275.	1.9	9
7	Jetâ€Printing Microfluidic Devices on Demand. Advanced Science, 2020, 7, 2001854.	11.2	17
8	Raising fluid walls around living cells. Science Advances, 2019, 5, eaav8002.	10.3	32
9	Biocompatibility of Sessile Drops as Chambers for Cell Culture. , 2019, , .		0
10	Extrusion without a motor: a new take on the loop extrusion model of genome organization. Nucleus, 2018, 9, 95-103.	2.2	38
11	Shaping epigenetic memory via genomic bookmarking. Nucleic Acids Research, 2018, 46, 83-93.	14.5	73
12	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.	14.5	92
13	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.	7.1	47
14	Ephemeral Protein Binding to DNA Shapes Stable Nuclear Bodies and Chromatin Domains. Biophysical Journal, 2017, 112, 1085-1093.	0.5	77
15	Microfluidics with fluid walls. Nature Communications, 2017, 8, 816.	12.8	96
16	Nonequilibrium Chromosome Looping via Molecular Slip Links. Physical Review Letters, 2017, 119, 138101.	7.8	105
17	Formation of droplet interface bilayers in a Teflon tube. Scientific Reports, 2016, 6, 34355.	3.3	6
18	Biocompatibility of fluids for multiphase drops-in-drops microfluidics. Biomedical Microdevices, 2016, 18, 114.	2.8	19

#	Article	IF	Citations
19	Super-resolution measurement of distance between transcription sites using RNA FISH with intronic probes. Methods, 2016, 98, 150-157.	3.8	3
20	Simulated binding of transcription factors to active and inactive regions folds human chromosomes into loops, rosettes and topological domains. Nucleic Acids Research, 2016, 44, 3503-3512.	14.5	157
21	Binding of nuclear factor ÎºB to noncanonical consensus sites reveals its multimodal role during the early inflammatory response. Genome Research, 2016, 26, 1478-1489.	5.5	43
22	Simulating topological domains in human chromosomes with a fitting-free model. Nucleus, 2016, 7, 453-461.	2.2	7
23	Isolation of the protein and RNA content of active sites of transcription from mammalian cells. Nature Protocols, 2016, 11, 553-565.	12.0	20
24	Splicing of many human genes involves sites embedded within introns. Nucleic Acids Research, 2015, 43, 4721-4732.	14.5	31
25	Dissecting the nascent human transcriptome by analysing the RNA content of transcription factories. Nucleic Acids Research, 2015, 43, e95-e95.	14.5	28
26	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	24
27	Why the activity of a gene depends on its neighbors. Trends in Genetics, 2015, 31, 483-490.	6.7	79
28	Exon Skipping Is Correlated with Exon Circularization. Journal of Molecular Biology, 2015, 427, 2414-2417.	4.2	308
29	Most Human Proteins Made in Both Nucleus and Cytoplasm Turn Over within Minutes. PLoS ONE, 2014, 9, e99346.	2.5	23
30	â€œDark matterâ€•worlds of unstable RNA and protein. Nucleus, 2014, 5, 281-286.	2.2	24
31	TNFÎ± signalling primes chromatin for NF-ÎºB binding and induces rapid and widespread nucleosome repositioning. Genome Biology, 2014, 15, 536.	8.8	45
32	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.	7.1	219
33	Multiscale Spatial Organization of RNA Polymerase in Escherichia coli. Biophysical Journal, 2013, 105, 172-181.	0.5	166
34	Transcription factories, chromatin loops, and the dysregulation of gene expression in malignancy. Seminars in Cancer Biology, 2013, 23, 65-71.	9.6	38
35	Transcription Factories: Genome Organization and Gene Regulation. Chemical Reviews, 2013, 113, 8683-8705.	47.7	218
36	Promoter type influences transcriptional topography by targeting genes to distinct nucleoplasmic sites. Journal of Cell Science, 2013, 126, 2052-9.	2.0	12

#	Article	IF	Citations
37	Space exploration by the promoter of a long human gene during one transcription cycle. Nucleic Acids Research, 2013, 41, 2216-2227.	14.5	26
38	Maximum precision closed-form solution for localizing diffraction-limited spots in noisy images. Optics Express, 2012, 20, 18478.	3.4	5
39	TNFÎ± signals through specialized factories where responsive coding and miRNA genes are transcribed. EMBO Journal, 2012, 31, 4404-4414.	7.8	122
40	Enhancers and silencers: an integrated and simple model for their function. Epigenetics and Chromatin, 2012, 5, 1.	3.9	119
41	Dynamic Reconfiguration of Long Human Genes during One Transcription Cycle. Molecular and Cellular Biology, 2012, 32, 2738-2747.	2.3	37
42	T7 RNA Polymerase Functions In Vitro without Clustering. PLoS ONE, 2012, 7, e40207.	2.5	2
43	The proteomes of transcription factories containing RNA polymerases I, II or III. Nature Methods, 2011, 8, 963-968.	19.0	74
44	Non-specific (entropic) forces as major determinants of the structure of mammalian chromosomes. Chromosome Research, 2011, 19, 53-61.	2.2	34
45	Fixing the model for transcription. Transcription, 2011, 2, 41-44.	3.1	37
46	Genome architecture and the role of transcription. Current Opinion in Cell Biology, 2010, 22, 271-276.	5.4	46
47	Active RNA Polymerases: Mobile or Immobile Molecular Machines?. PLoS Biology, 2010, 8, e1000419.	5.6	84
48	A Model for all Genomes: The Role of Transcription Factories. Journal of Molecular Biology, 2010, 395, 1-10.	4.2	223
49	A wave of nascent transcription on activated human genes. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 18357-18361.	7.1	145
50	Entropic organization of interphase chromosomes. Journal of Cell Biology, 2009, 186, 825-834.	5.2	144
51	The role of specialized transcription factories in chromosome pairing. Biochimica Et Biophysica Acta - Molecular Cell Research, 2008, 1783, 2155-2160.	4.1	63
52	Transcription factories. Biochemical Society Transactions, 2008, 36, 585-589.	3.4	62
53	Similar active genes cluster in specialized transcription factories. Journal of Cell Biology, 2008, 181, 615-623.	5.2	131
54	RNA polymerase II activity is located on the surface of protein-rich transcription factories. Journal of Cell Science, 2008, 121, 1999-2007.	2.0	75

#	Article	IF	Citations
55	Photobleaching reveals complex effects of inhibitors on transcribing RNA polymerase II in living cells. Experimental Cell Research, 2007, 313, 3026-3033.	2.6	8
56	What are the molecular ties that maintain genomic loops?. Trends in Genetics, 2007, 23, 126-133.	6.7	97
57	Dynamic Chromatin Loops and the Regulation of Gene Expression. , 2007, , 177-195.		0
58	Entropy-Driven Genome Organization. Biophysical Journal, 2006, 90, 3712-3721.	0.5	164
59	Transcription factories: structures conserved during differentiation and evolution. Biochemical Society Transactions, 2006, 34, 1133-1137.	3.4	51
60	Modeling a Self-Avoiding Chromatin Loop: Relation to the Packing Problem, Action-at-a-Distance, and Nuclear Context. Structure, 2006, 14, 197-204.	3.3	19
61	Many expressed genes in bacteria and yeast are transcribed only once per cell cycle. FASEB Journal, 2006, 20, 1721-1723.	0.5	40
62	The depletion attraction: an underappreciated force driving cellular organization. Journal of Cell Biology, 2006, 175, 681-686.	5.2	341
63	Depletion Effects and Loop Formation in Self-Avoiding Polymers. Physical Review Letters, 2006, 97, 178302.	7.8	56
64	A Conserved Organization of Transcription during Embryonic Stem Cell Differentiation and in Cells with High C Value. Molecular Biology of the Cell, 2006, 17, 2910-2920.	2.1	53
65	Specialized transcription factories. Biochemical Society Symposia, 2006, 73, 67-75.	2.7	47
66	Different populations of RNA polymerase II in living mammalian cells. Chromosome Research, 2005, 13, 135-144.	2.2	45
67	Confocal Fluorescence Imaging of Photosensitized DNA Denaturation in Cell Nuclei^{Â¶}. Photochemistry and Photobiology, 2005, 81, 960-969.	2.5	11
68	Molecular cross-talk between the transcription, translation, and nonsense-mediated decay machineries. Journal of Cell Science, 2004, 117, 899-906.	2.0	52
69	The case for nuclear translation. Journal of Cell Science, 2004, 117, 5713-5720.	2.0	46
70	Applying microscopy to the analysis of nuclear structure and function. Methods, 2003, 29, 131-141.	3.8	9
71	Nongenic transcription, gene regulation and action at a distance. Journal of Cell Science, 2003, 116, 4483-4491.	2.0	64
72	The transcription cycle of RNA polymerase II in living cells. Journal of Cell Biology, 2002, 159, 777-782.	5.2	234

#	Article	IF	Citations
73	The interdependence of nuclear structure and function. Current Opinion in Cell Biology, 2002, 14, 780-785.	5.4	21
74	Predicting three-dimensional genome structure from transcriptional activity. Nature Genetics, 2002, 32, 347-352.	21.4	147
75	Coupled Transcription and Translation Within Nuclei of Mammalian Cells. Science, 2001, 293, 1139-1142.	12.6	340
76	A mutation in the largest (catalytic) subunit of RNA polymerase II and its relation to the arrest of the cell cycle in G1 phase. Gene, 2001, 274, 77-81.	2.2	15
77	Kinetics of Core Histones in Living Human Cells. Journal of Cell Biology, 2001, 153, 1341-1354.	5.2	626
78	Correlative Fluorescence and Electron Microscopy on Ultrathin Cryosections: Bridging the Resolution Gap. Journal of Histochemistry and Cytochemistry, 2001, 49, 803-808.	2.5	77
79	Stable correction of a genetic deficiency in human cells by an episome carrying a 115 kb genomic transgene. Nature Biotechnology, 2000, 18, 1311-1314.	17.5	77
80	Isolation and Characterization of Monoclonal Antibodies Directed against Subunits of Human RNA Polymerases I, II, and III. Experimental Cell Research, 2000, 254, 163-172.	2.6	20
81	Direct Imaging of DNA in Living Cells Reveals the Dynamics of Chromosome Formation. Journal of Cell Biology, 1999, 144, 813-822.	5.2	180
82	Bridging the Resolution Gap: Imaging the Same Transcription Factories in Cryosections by Light and Electron Microscopy. Journal of Histochemistry and Cytochemistry, 1999, 47, 471-480.	2.5	53
83	Regional specialization in human nuclei: visualization of discrete sites of transcription by RNA polymerase III. EMBO Journal, 1999, 18, 2241-2253.	7.8	223
84	The Organization of Replication and Transcription. Science, 1999, 284, 1790-1795.	12.6	703
85	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, 5383-5392.	2.3	147
86	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, 1768-1778.	7.8	113
87	Numbers and Organization of RNA Polymerases, Nascent Transcripts, and Transcription Units in HeLa Nuclei. Molecular Biology of the Cell, 1998, 9, 1523-1536.	2.1	279
88	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, 985-992.	2.5	21
89	The transcriptional basis of chromosome pairing. Journal of Cell Science, 1997, 110 (Pt 9), 1033-40.	2.0	35
90	4-Picoline-2,2â€²:6â€²,2â€³-terpyridine-platinum(II) - A potent intercalator of DNA. FEBS Letters, 1996, 380, 73-78.	2.8	90

#	Article	IF	Citations
91	The Topology of Transcription by Immobilized Polymerases. Experimental Cell Research, 1996, 229, 167-173.	2.6	58
92	The Localization of Sites Containing Nascent RNA and Splicing Factors. Experimental Cell Research, 1996, 229, 201-203.	2.6	48
93	Sequences Attaching Loops of Nuclear and Mitochondrial DNA to Underlying Structures in Human Cells: The Role of Transcription Units. Nucleic Acids Research, 1996, 24, 1212-1219.	14.5	71
94	A chromomeric model for nuclear and chromosome structure. Journal of Cell Science, 1995, 108 (Pt) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	2.0	31
95	Hypothesis: RNA polymerase: Structural determinat of the chromatin loop and the chromosome. BioEssays, 1994, 16, 425-430.	2.5	54
96	Visualization of replication factories attached to a nucleoskeleton. Cell, 1993, 73, 361-373.	28.9	461
97	A model for reverse transcription by a dimeric enzyme. Journal of General Virology, 1993, 74, 691-697.	2.9	9
98	Visualization of focal sites of transcription within human nuclei. EMBO Journal, 1993, 12, 1059-65.	7.8	274
99	Transcription by an immobilized RNA polymerase from bacteriophage T7 and the topolgy of transcription. Nucleic Acids Research, 1992, 20, 3591-3598.	14.5	18
100	The nucleoskeleton and the topology of replication. Cell, 1991, 66, 627-635.	28.9	218
101	Active RNA polymerase I is fixed within the nucleus of HeLa cells.. EMBO Journal, 1990, 9, 2207-2214.	7.8	53
102	How mobile are active RNA polymerases?. Journal of Cell Science, 1990, 96 (Pt 2), 189-92.	2.0	1
103	The nucleoskeleton and the topology of transcription. FEBS Journal, 1989, 185, 487-501.	0.2	108
104	Replication and transcription depend on attachment of DNA to the nuclear cage. Journal of Cell Science, 1984, 1984, 59-79.	2.0	80
105	RNA is synthesized at the nuclear cage. Nature, 1981, 292, 552-555.	27.8	259
106	Spectrofluorometric Measurement of the Binding of Ethidium to Superhelical DNA from Cell Nuclei. FEBS Journal, 1978, 84, 465-477.	0.2	107
107	The Superhelical Density of Nuclear DNA from Human Cells. FEBS Journal, 1977, 74, 527-532.	0.2	24
108	Transcription of Superhelical DNA from Cell Nuclei. FEBS Journal, 1977, 76, 63-78.	0.2	31

#	Article	IF	Citations
109	Conformational constraints in nuclear DNA. Journal of Cell Science, 1976, 22, 287-302.	2.0	190
110	ON THE INHERITANCE OF DIFFERENTIATED TRAITS. Biological Reviews, 1974, 49, 51-84.	10.4	31
111	Characterization of hypoxanthine-guanine phosphoribosyl transferase in man-mouse somatic cell hybrids by an improved electrophoretic method. Biochemical Genetics, 1971, 5, 91-99.	1.7	52
112	Species specificity of an enzyme determined by an erythrocyte nucleus in an interspecific hybrid cell. Journal of Cell Science, 1970, 7, 1-4.	2.0	25