Philip C Hanawalt

List of Publications by Year
in descending order

127 papers	13,941 citations	24978 57 h-index	21474 114 g-index
128 all docs	128 docs citations	128 times ranked	8590 citing authors

#	Article	IF	Citations
1	Mechanism for R-loop formation remote from the transcription start site: Topological issues and possible facilitation by dissociation of RNA polymerase. DNA Repair, 2022, 110, 103275.	1.3	6
2	Mechanistic understanding of cellular responses to genomic stress. Environmental and Molecular Mutagenesis, 2020, 61, 25-33.	0.9	5
3	Tribute to Sam Wilson: Shining a light on base excision DNA repair. DNA Repair, 2020, 93, 102933.	1.3	0
4	Transcription Inhibition by PNA-Induced R-Loops. Methods in Molecular Biology, 2020, 2105, 141-155.	0.4	0
5	A novel mode for transcription inhibition mediated by PNA-induced R-loops with a model in vitro system. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2018, 1861, 158-166.	0.9	8
6	Cutting-edge perspectives in genomic maintenance V. DNA Repair, 2018, 71, 1-2.	1.3	0
7	R-loop generation during transcription: Formation, processing and cellular outcomes. DNA Repair, 2018, 71, 69-81.	1.3	101
8	Modulation of Cytotoxicity by Transcription-Coupled Nucleotide Excision Repair Is Independent of the Requirement for Bioactivation of Acylfulvene. Chemical Research in Toxicology, 2017, 30, 769-776.	1.7	7
9	Strong transcription blockage mediated by R-loop formation within a G-rich homopurineâ€“homopyrimidine sequence localized in the vicinity of the promoter. Nucleic Acids Research, 2017, 45, 6589-6599.	6.5	58
10	When transcription goes on Holliday: Double Holliday junctions block RNA polymerase II transcription in vitro. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2017, 1860, 282-288.	0.9	5
11	Photobiological Origins of the Field of Genomic Maintenance. Photochemistry and Photobiology, 2016, 92, 52-60.	1.3	20
12	Cutting-edge Perspectives in Genomic Maintenance III: Preface. DNA Repair, 2016, 44, 1-3.	1.3	4
13	Mutational Strand Asymmetries in Cancer Genomes Reveal Mechanisms of DNA Damage and Repair. Cell, 2016, 164, 538-549.	13.5	363
14	Altered Minorâ€Groove Hydrogen Bonds in DNA Block Transcription Elongation by T7 RNA Polymerase. ChemBioChem, 2015, 16, 1212-1218.	1.3	4
15	A balanced perspective on unbalanced growth and thymineless death. Frontiers in Microbiology, 2015, 6, 504.	1.5	13
16	24 Interference of PNA binding to the non-template strand with transcription supports the general model for transcription blockage by R-loop formation. Journal of Biomolecular Structure and Dynamics, 2015, 33, 14-14.	2.0	3
17	Photosensitive human syndromes. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2015, 776, 24-30.	0.4	19
18	Historical perspective on the DNA damage response. DNA Repair, 2015, 36, 2-7.	1.3	51

#	Article	IF	Citations
19	Preface. DNA Repair, 2015, 32, 1-2.	1.3	1
20	Transcription blockage by stable H-DNA analogs in vitro. Nucleic Acids Research, 2015, 43, 6994-7004.	6.5	28
21	Thymineless Death Lives On: New Insights into a Classic Phenomenon. Annual Review of Microbiology, 2015, 69, 247-263.	2.9	50
22	PNA binding to the nonâ€template DNA strand interferes with transcription, suggesting a blockage mechanism mediated by Râ€loop formation. Molecular Carcinogenesis, 2015, 54, 1508-1512.	1.3	16
23	In memory of John Bruce Hays (1937â€“2014). DNA Repair, 2014, 16, vi-vii.	1.3	0
24	DNA Sequences That Interfere with Transcription: Implications for Genome Function and Stability. Chemical Reviews, 2013, 113, 8620-8637.	23.0	96
25	Comet-FISH with strand-specific probes reveals transcription-coupled repair of 8-oxoGuanine in human cells. Nucleic Acids Research, 2013, 41, 7700-7712.	6.5	85
26	Transcription blockage by homopurine DNA sequences: role of sequence composition and single-strand breaks. Nucleic Acids Research, 2013, 41, 1817-1828.	6.5	57
27	The awakening of DNA repair at Yale. Yale Journal of Biology and Medicine, 2013, 86, 517-23.	0.2	2
28	Transcription Blockage by Bulky End Termini at Single-Strand Breaks in the DNA Template: Differential Effects of 5â€² and 3â€² Adducts. Biochemistry, 2012, 51, 8964-8970.	1.2	29
29	Lesion Sensing and Decision Points in the DNA Damage Response. Issues in Toxicology, 2012, , 190-211.	0.2	0
30	Transcription-Coupled DNA Repair in Prokaryotes. Progress in Molecular Biology and Translational Science, 2012, 110, 25-40.	0.9	43
31	A novel <i>XPD</i> mutation in a compound heterozygote; the mutation in the second allele is present in three homozygous patients with mild sun sensitivity. Environmental and Molecular Mutagenesis, 2012, 53, 505-514.	0.9	12
32	Anchoring Nascent RNA to the DNA Template Could Interfere with Transcription. Biophysical Journal, 2011, 100, 675-684.	0.2	27
33	DNA slip-outs cause RNA polymerase II arrest in vitro : potential implications for genetic instability. Nucleic Acids Research, 2011, 39, 7444-7454.	6.5	56
34	Transcription-coupled nucleotide excision repair of a gene transcribed by bacteriophage T7 RNA polymerase in Escherichia coli. DNA Repair, 2010, 9, 958-963.	1.3	10
35	Growing up with DNA repair and joining the EMS. Environmental and Molecular Mutagenesis, 2010, 51, 890-896.	0.9	2
36	Thymineless death is associated with loss of essential genetic information from the replication origin. Molecular Microbiology, 2010, 75, 1455-1467.	1.2	47

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37	Mechanisms and implications of transcription blockage by guanine-rich DNA sequences. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 12816-12821.	3.3	136
38	Role of RecA and the SOS Response in Thymineless Death in Escherichia coli. PLoS Genetics, 2010, 6, e1000865.	1.5	57
39	A UV-sensitive syndrome patient with a specific <i>CSA</i> mutation reveals separable roles for CSA in response to UV and oxidative DNA damage. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 6209-6214.	3.3	112
40	Peptide nucleic acid (PNA) binding and its effect on in vitro transcription in friedreich's ataxia triplet repeats. Molecular Carcinogenesis, 2009, 48, 299-308.	1.3	16
41	New applications of the Comet assay: Cometâ€“FISH and transcription-coupled DNA repair. Mutation Research - Reviews in Mutation Research, 2009, 681, 44-50.	2.4	34
42	Transcription-coupled DNA repair: two decades of progress and surprises. Nature Reviews Molecular Cell Biology, 2008, 9, 958-970.	16.1	896
43	Emerging links between premature ageing and defective DNA repair. Mechanisms of Ageing and Development, 2008, 129, 503-505.	2.2	15
44	G4-forming Sequences in the Non-transcribed DNA Strand Pose Blocks to T7 RNA Polymerase and Mammalian RNA Polymerase II. Journal of Biological Chemistry, 2008, 283, 12756-12762.	1.6	72
45	Inhibitory effect of a short Z-DNA forming sequence on transcription elongation by T7 RNA polymerase. Nucleic Acids Research, 2008, 36, 3163-3170.	6.5	55
46	Paradigms for the Three Rs: DNA Replication, Recombination, and Repair. Molecular Cell, 2007, 28, 702-707.	4.5	44
47	A Triplex-forming Sequence from the Human c-MYC Promoter Interferes with DNA Transcription. Journal of Biological Chemistry, 2007, 282, 32433-32441.	1.6	128
48	Transcription coupled nucleotide excision repair in Escherichia coli can be affected by changing the arginine at position 529 of the Î² subunit of RNA polymerase. DNA Repair, 2007, 6, 1434-1440.	1.3	7
49	Nucleotide excision repair phenotype of human acute myeloid leukemia cell lines at various stages of differentiation. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2007, 614, 3-15.	0.4	20
50	Transcriptional Inhibition by an Oxidized Abasic Site in DNA. Chemical Research in Toxicology, 2006, 19, 234-241.	1.7	24
51	Transcription Arrest at an Abasic Site in the Transcribed Strand of Template DNA. Chemical Research in Toxicology, 2006, 19, 1215-1220.	1.7	78
52	Host cell reactivation of plasmids containing oxidative DNA lesions is defective in Cockayne syndrome but normal in UV-sensitive syndrome fibroblasts. DNA Repair, 2006, 5, 13-22.	1.3	122
53	Role of DNA Replication and Repair in Thymineless Death in Escherichia coli. Journal of Bacteriology, 2006, 188, 5286-5288.	1.0	24
54	Transcription Domain-Associated Repair in Human Cells. Molecular and Cellular Biology, 2006, 26, 8722-8730.	1.1	72

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55	Impaired nucleotide excision repair upon macrophage differentiation is corrected by E1 ubiquitin-activating enzyme. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 16188-16193.	3.3	39
56	Nucleotide Excision Repair Activity Varies Among Murine Spermatogenic Cell Types1. Biology of Reproduction, 2005, 73, 123-130.	1.2	47
57	Differential incorporation of halogenated deoxyuridines during UV-induced DNA repair synthesis in human cells. DNA Repair, 2005, 4, 359-366.	1.3	8
58	Density matters: The semiconservative replication of DNA. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 17889-17894.	3.3	24
59	Malondialdehyde adducts in DNA arrest transcription by T7 RNA polymerase and mammalian RNA polymerase II. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 7275-7280.	3.3	63
60	Effect of 8-oxoguanine on transcription elongation by T7 RNA polymerase and mammalian RNA polymerase II. DNA Repair, 2004, 3, 483-494.	1.3	121
61	When parsimony backfires: Neglecting DNA repair may doom neurons in Alzheimer's disease. BioEssays, 2003, 25, 168-173.	1.2	64
62	Who's on first in the cellular response to DNA damage?. Nature Reviews Molecular Cell Biology, 2003, 4, 361-373.	16.1	119
63	Functional characterization of global genomic DNA repair and its implications for cancer. Mutation Research - Reviews in Mutation Research, 2003, 544, 107-114.	2.4	110
64	Four decades of DNA repair: from early insights to current perspectives. Biochimie, 2003, 85, 1043-1052.	1.3	7
65	RecA-Dependent Recovery of Arrested DNA Replication Forks. Annual Review of Genetics, 2003, 37, 611-646.	3.2	187
66	Behavior of T7 RNA Polymerase and Mammalian RNA Polymerase II at Site-specific Cisplatin Adducts in the Template DNA. Journal of Biological Chemistry, 2003, 278, 35791-35797.	1.6	86
67	A cut above: Discovery of an alternative excision repair pathway in bacteria. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 2581-2583.	3.3	42
68	Clustered Sites of DNA Repair Synthesis during Early Nucleotide Excision Repair in Ultraviolet Light-Irradiated Quiescent Human Fibroblasts. Experimental Cell Research, 2002, 276, 284-295.	1.2	12
69	DNA repair in terminally differentiated cells. DNA Repair, 2002, 1, 59-75.	1.3	209
70	Ultraviolet-sensitive syndrome cells are defective in transcription-coupled repair of cyclobutane pyrimidine dimers. DNA Repair, 2002, 1, 629-643.	1.3	55
71	Subpathways of nucleotide excision repair and their regulation. Oncogene, 2002, 21, 8949-8956.	2.6	397
72	Controlling the efficiency of excision repair. Mutation Research DNA Repair, 2001, 485, 3-13.	3.8	127

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73	The SOS-dependent upregulation of uvrD is not required for efficient nucleotide excision repair of ultraviolet light induced DNA photoproducts in Escherichia coli. Mutation Research DNA Repair, 2001, 485, 319-329.	3.8	25
74	Revisiting the rodent repairadox. Environmental and Molecular Mutagenesis, 2001, 38, 89-96.	0.9	75
75	Effect of Thymine Glycol on Transcription Elongation by T7 RNA Polymerase and Mammalian RNA Polymerase II. Journal of Biological Chemistry, 2001, 276, 45367-45371.	1.6	82
76	Comparative Gene Expression Profiles Following UV Exposure in Wild-Type and SOS-Deficient <i>Escherichia coli</i>. Genetics, 2001, 158, 41-64.	1.2	721
77	Reduced global genomic repair of ultraviolet light-induced cyclobutane pyrimidine dimers in simian virus 40-transformed human cells. Molecular Carcinogenesis, 2000, 29, 17-24.	1.3	48
78	The bases for Cockayne syndrome. Nature, 2000, 405, 415-415.	13.7	93
79	p53-Mediated DNA Repair Responses to UV Radiation: Studies of Mouse Cells Lacking p53 , p21 , and/or gadd45 Genes. Molecular and Cellular Biology, 2000, 20, 3705-3714.	1.1	411
80	Terminally Differentiated Human Neurons Repair Transcribed Genes but Display Attenuated Global DNA Repair and Modulation of Repair Gene Expression. Molecular and Cellular Biology, 2000, 20, 1562-1570.	1.1	182
81	Xeroderma Pigmentosum p48 Gene Enhances Global Genomic Repair and Suppresses UV-Induced Mutagenesis. Molecular Cell, 2000, 5, 737-744.	4.5	312
82	Structural Characterization of RNA Polymerase II Complexes Arrested by a Cyclobutane Pyrimidine Dimer in the Transcribed Strand of Template DNA. Journal of Biological Chemistry, 1999, 274, 24124-24130.	1.6	123
83	Expression and nucleotide excision repair of a UV-irradiated reporter gene in unirradiated human cells. Mutation Research DNA Repair, 1999, 433, 117-126.	3.8	20
84	A phylogenomic study of DNA repair genes, proteins, and processes. Mutation Research DNA Repair, 1999, 435, 171-213.	3.8	398
85	Effect of DNA lesions on transcription elongation. Biochimie, 1999, 81, 139-146.	1.3	202
86	Reduced extractability of the XPA DNA repair protein in ultraviolet light-irradiated mammalian cells. FEBS Letters, 1999, 463, 49-52.	1.3	16
87	Transcription-Coupled DNA Repair. , 1999, , 169-179.		20
88	Recovery of DNA Replication in UV-Irradiated <i>Escherichia coli</i> Requires both Excision Repair and RecF Protein Function. Journal of Bacteriology, 1999, 181, 916-922.	1.0	123
89	Induction of the SOS Response Increases the Efficiency of Global Nucleotide Excision Repair of Cyclobutane Pyrimidine Dimers, but Not 6-4 Photoproducts, in UV-Irradiated <i>Escherichia coli</i>. Journal of Bacteriology, 1998, 180, 3345-3352.	1.0	90
90	Expression of Wild-type p53 Is Required for Efficient Global Genomic Nucleotide Excision Repair in UV-irradiated Human Fibroblasts. Journal of Biological Chemistry, 1997, 272, 28073-28080.	1.6	318

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91	Excision-repair patch lengths are similar for transcription-coupled repair and global genome repair in UV-irradiated human cells. Mutation Research DNA Repair, 1997, 385, 95-105.	3.8	26
92	Mismatch Repair Mutants in Yeast Are Not Defective in Transcription-Coupled DNA Repair of UV-Induced DNA Damage. Genetics, 1996, 143, 1127-1135.	1.2	40
93	Evolution of the SNF2 family of proteins: subfamilies with distinct sequences and functions. Nucleic Acids Research, 1995, 23, 2715-2723.	6.5	656
94	Preferential repair of the transcribed DNA strand in the dihydrofolate reductase gene throughout the cell cycle in UV-irradiated human cells. Mutation Research DNA Repair, 1995, 336, 181-192.	3.8	40
95	Evolution of concepts in DNA repair. Environmental and Molecular Mutagenesis, 1994, 23, 78-85.	0.9	24
96	â€œClose fitting sleevesâ€•â€" Recognition of structural defects in duplex DNA. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 1993, 289, 7-15.	0.4	9
97	Stranded in an active gene. Current Biology, 1993, 3, 67-69.	1.8	109
98	Lack of transcription-coupled repair in mammalian ribosomal RNA genes. Biochemistry, 1993, 32, 10512-10518.	1.2	85
99	Inhibition of transcription and strand-specific DNA repair by Î±-amanitin in Chinese hamster ovary cells. Mutation Research DNA Repair, 1992, 274, 93-101.	3.8	100
100	Translesion DNA synthesis in the dihydrofolate reductase domain of UV-irradiated CHO cells. Biochemistry, 1992, 31, 6794-6800.	1.2	62
101	Efficient protection against oxidative DNA damage in chromatin. Molecular Carcinogenesis, 1992, 5, 264-269.	1.3	126
102	The genetic defect in the Chinese hamster ovary cell mutant UV61 permits moderate selective repair of cyclobutane pyrimidine dimers in an expressed gene. Mutation Research DNA Repair, 1991, 255, 183-191.	3.8	51
103	Lack of sequence-specific removal of N-methylpurines from cellular DNA. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 1990, 233, 31-37.	0.4	15
104	Selective repair of specific chromatin domains in UV-irradiated cells from xeroderma pigmentosum complementation group C. Mutation Research DNA Repair, 1990, 235, 171-180.	3.8	86
105	Concepts and models for DNA repair: FromEscherichia coli to mammalian cells. Environmental and Molecular Mutagenesis, 1989, 14, 90-98.	0.9	33
106	Induction of the Escherichia coli lactose operon selectively increases repair of its transcribed DNA strand. Nature, 1989, 342, 95-98.	13.7	559
107	Isolation and genetic characterization of a thymineless death-resistant mutant of Escherichia coli K12: Identification of a new mutation (recQ1) that blocks the RecF recombination pathway. Molecular Genetics and Genomics, 1984, 195, 474-480.	2.4	246
108	Deficient repair of chemical adducts in Î± DNA of monkey cells. Cell, 1982, 28, 613-619.	13.5	108

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109	Ligation of oligonucleotides by pyrimidine dimersâ€”a missing â€˜linkâ€™ in the origin of life?. Nature, 1982, 298, 393-396.	13.7	46
110	Rearrangement of mammalian chromatin structure following excision repair. Nature, 1982, 299, 462-464.	13.7	53
111	Sensitive determination of pyrimidine dimers in DNA of UV-irradiated mammalian cells Introduction of T4 endonuclease V into frozen and thawed cells. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 1981, 82, 173-189.	0.4	116
112	Processive action of T4 endonuclease V on ultraviolet-irradiated DNA. Nucleic Acids Research, 1980, 8, 5113-5127.	6.5	88
113	DNA Repair in Bacteria and Mammalian Cells. Annual Review of Biochemistry, 1979, 48, 783-836.	5.0	891
114	Turnover in bacterial DNA containing thymine or 5-bromouracil. Journal of Molecular Biology, 1975, 98, 219-233.	2.0	30
115	Role of DNA Polymerase II in Repair Replication in Escherichia coli. Nature: New Biology, 1973, 244, 242-243.	4.5	84
116	Heterogeneity of patch size in repair replicated DNA in Escherichia coli. Journal of Molecular Biology, 1972, 67, 1-10.	2.0	157
117	CELLULAR RECOVERY FROM PHOTOCHEMICAL DAMAGE. , 1968, , 203-251.		38
118	Macromolecular Synthesis and Thymineless Death in <i>Mycoplasma laidlawii</i> B. Journal of Bacteriology, 1968, 96, 2066-2076.	1.0	52
119	DNA repair replication in temperature-sensitive DNA synthesis deficient bacteria. Biochemical and Biophysical Research Communications, 1967, 29, 779-784.	1.0	37
120	The Repair of DNA. Scientific American, 1967, 216, 36-43.	1.0	58
121	THE U.V. SENSITIVITY OF BACTERIA: ITS RELATION TO THE DNA REPLICATION CYCLE. Photochemistry and Photobiology, 1966, 5, 1-12.	1.3	128
122	Repair replication of DNA in bacteria: Irrelevance of chemical nature of base defect. Biochemical and Biophysical Research Communications, 1965, 19, 462-467.	1.0	125
123	Evidence for repair-replication of ultraviolet damaged DNA in bacteria. Journal of Molecular Biology, 1964, 9, 395-410.	2.0	520
124	Thymine deficiency and the normal DNA replication cycle. I. Journal of Molecular Biology, 1961, 3, 144-155.	2.0	706
125	The normal DNA replication cycle. II. Journal of Molecular Biology, 1961, 3, 156-165.	2.0	224
126	Effect of monochromatic ultraviolet light on macromolecular synthesis in Escherichia coli. Biochimica Et Biophysica Acta, 1960, 41, 283-294.	1.3	82

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127	Photoreactivation of macromolecular synthesis in Escherichia coli. Biochimica Et Biophysica Acta, 1960, 37, 141-143.	1.3	14