Samuel H Wilson

List of Publications by Year
in descending order

464 papers	28,857 citations	3334 91 h-index	8866 145 g-index
476 all docs	476 docs citations	476 times ranked	12054 citing authors

#	Article	IF	Citations
1	Requirement of mammalian DNA polymerase-Î² in base-excision repair. Nature, 1996, 379, 183-186.	27.8	827
2	Structures of ternary complexes of rat DNA polymerase beta, a DNA template-primer, and ddCTP. Science, 1994, 264, 1891-1903.	12.6	767
3	Crystal Structures of Human DNA Polymerase Î² Complexed with Gapped and Nicked DNA:â€‰ Evidence for an Induced Fit Mechanism,. Biochemistry, 1997, 36, 11205-11215.	2.5	632
4	Crystal structure of rat DNA polymerase beta: evidence for a common polymerase mechanism. Science, 1994, 264, 1930-1935.	12.6	494
5	AP Endonuclease-Independent DNA Base Excision Repair in Human Cells. Molecular Cell, 2004, 15, 209-220.	9.7	434
6	OGG1 initiates age-dependent CAG trinucleotide expansion in somatic cells. Nature, 2007, 447, 447-452.	27.8	392
7	Markers for Gene Expression in Cultured Cells from the Nervous System. Journal of Biological Chemistry, 1972, 247, 3159-3169.	3.4	386
8	HTLV-I trans-activator protein, tax, is a trans-repressor of the human beta-polymerase gene. Science, 1990, 247, 1082-1084.	12.6	351
9	Mammalian Abasic Site Base Excision Repair. Journal of Biological Chemistry, 1998, 273, 21203-21209.	3.4	339
10	The lyase activity of the DNA repair protein Î²-polymerase protects from DNA-damage-induced cytotoxicity. Nature, 2000, 405, 807-810.	27.8	316
11	DNA Polymerase Î² Conducts the Gap-filling Step in Uracil-initiated Base Excision Repair in a Bovine Testis Nuclear Extract. Journal of Biological Chemistry, 1995, 270, 949-957.	3.4	302
12	A role for p53 in base excision repair. EMBO Journal, 2001, 20, 914-923.	7.8	288
13	In situ analysis of repair processes for oxidative DNA damage in mammalian cells. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 13738-13743.	7.1	284
14	Structure and Mechanism of DNA Polymerase Î². Chemical Reviews, 2006, 106, 361-382.	47.7	281
15	Crystal Structures of Human DNA Polymerase Î² Complexed with DNA:Â Implications for Catalytic Mechanism, Processivity, and Fidelityâ€,â€¡. Biochemistry, 1996, 35, 12742-12761.	2.5	276
16	Mammalian base excision repair and DNA polymerase beta. Mutation Research DNA Repair, 1998, 407, 203-215.	3.7	249
17	Specific Interaction of DNA Polymerase Î² and DNA Ligase I in a Multiprotein Base Excision Repair Complex from Bovine Testis. Journal of Biological Chemistry, 1996, 271, 16000-16007.	3.4	242
18	Magnesium-Induced Assembly of a Complete DNA Polymerase Catalytic Complex. Structure, 2006, 14, 757-766.	3.3	242

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19	Passing the baton in base excision repair. , 2000, 7, 176-178.		228
20	The Werner syndrome protein operates in base excision repair and cooperates with DNA polymerase Â. Nucleic Acids Research, 2006, 34, 745-754.	14.5	228
21	Different DNA Polymerases Are Involved in the Short- and Long-Patch Base Excision Repair in Mammalian Cells. Biochemistry, 1998, 37, 3575-3580.	2.5	214
22	Identification of 5'-deoxyribose phosphate lyase activity in human DNA polymerase Â and its role in mitochondrial base excision repair in vitro. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 12244-12248.	7.1	212
23	Biomedical research leaders: report on needs, opportunities, difficulties, education and training, and evaluation.. Environmental Health Perspectives, 2000, 108, 979-995.	6.0	212
24	Regulation of Acetylcholinesterase in Neuroblastoma Cells. Proceedings of the National Academy of Sciences of the United States of America, 1970, 67, 786-792.	7.1	208
25	Stepwise mechanism of HIV reverse transcriptase: primer function of phosphorothioate oligodeoxynucleotide. Biochemistry, 1989, 28, 1340-1346.	2.5	208
26	Role of DNA Polymerase Î² in the Excision Step of Long Patch Mammalian Base Excision Repair. Journal of Biological Chemistry, 1999, 274, 13741-13743.	3.4	202
27	Impairment of Proliferating Cell Nuclear Antigen-dependent Apurinic/Apyrimidinic Site Repair on Linear DNA. Journal of Biological Chemistry, 1998, 273, 898-902.	3.4	191
28	XRCC1 and DNA polymerase Î² in cellular protection against cytotoxic DNA single-strand breaks. Cell Research, 2008, 18, 48-63.	12.0	190
29	FEN1 Stimulation of DNA Polymerase Î² Mediates an Excision Step in Mammalian Long Patch Base Excision Repair. Journal of Biological Chemistry, 2000, 275, 4460-4466.	3.4	187
30	5'-Deoxyribose Phosphate Lyase Activity of Human DNA Polymerase &igr; in Vitro. Science, 2001, 291, 2156-2159.	12.6	187
31	Observing a DNA Polymerase Choose Right from Wrong. Cell, 2013, 154, 157-168.	28.9	186
32	Human DNA Polymerase Î² Deoxyribose Phosphate Lyase. Journal of Biological Chemistry, 1998, 273, 15263-15270.	3.4	177
33	DNA Polymerase Î²-mediated Long Patch Base Excision Repair. Journal of Biological Chemistry, 2001, 276, 32411-32414.	3.4	177
34	Photoaffinity Labeling of Mouse Fibroblast Enzymes by a Base Excision Repair Intermediate. Journal of Biological Chemistry, 2001, 276, 25541-25548.	3.4	174
35	Physiology of rat-liver polysomes. The stability of messenger ribonucleic acid and ribosomes. Biochemical Journal, 1967, 103, 556-566.	2.8	173
36	A Structural Basis for Metal Ion Mutagenicity and Nucleotide Selectivity in Human DNA Polymerase Î²â€‚â€¡. Biochemistry, 1996, 35, 12762-12777.	2.5	173

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37	Mammalian base excision repair by DNA polymerases Î´ and Îµ. Oncogene, 1998, 17, 835-843.	5.9	169
38	Abasic Translesion Synthesis by DNA Polymerase Î² Violates the â€œA-ruleâ€. Journal of Biological Chemistry, 1997, 272, 2559-2569.	3.4	162
39	Base Excision Repair Intermediates Induce p53-independent Cytotoxic and Genotoxic Responses. Journal of Biological Chemistry, 2003, 278, 39951-39959.	3.4	162
40	Evidence for an Imino Intermediate in the DNA Polymerase Î² Deoxyribose Phosphate Excision Reaction. Journal of Biological Chemistry, 1996, 271, 17811-17815.	3.4	158
41	The X family portrait: Structural insights into biological functions of X family polymerases. DNA Repair, 2007, 6, 1709-1725.	2.8	158
42	Induction of beta-polymerase mRNA by DNA-damaging agents in Chinese hamster ovary cells.. Molecular and Cellular Biology, 1989, 9, 851-853.	2.3	155
43	Enzyme-DNA Interactions Required for Efficient Nucleotide Incorporation and Discrimination in Human DNA Polymerase Î². Journal of Biological Chemistry, 1996, 271, 12141-12144.	3.4	153
44	[11] Purification and domain-mapping of mammalian DNA polymerase Î². Methods in Enzymology, 1995, 262, 98-107.	1.0	151
45	Substrate Binding by Human Apurinic/Apyrimidinic Endonuclease Indicates a Briggs-Haldane Mechanism. Journal of Biological Chemistry, 1997, 272, 1302-1307.	3.4	150
46	Structural Insights into the Origins of DNA Polymerase Fidelity. Structure, 2003, 11, 489-496.	3.3	144
47	DNA Structure and Aspartate 276 Influence Nucleotide Binding to Human DNA Polymerase Î². Journal of Biological Chemistry, 2001, 276, 3408-3416.	3.4	142
48	DNA Polymerase Î» Mediates a Back-up Base Excision Repair Activity in Extracts of Mouse Embryonic Fibroblasts. Journal of Biological Chemistry, 2005, 280, 18469-18475.	3.4	141
49	HMGB1 Is a Cofactor in Mammalian Base Excision Repair. Molecular Cell, 2007, 27, 829-841.	9.7	141
50	Apurinic/apyrimidinic (AP) site recognition by the 5â€²-dRP/AP lyase in poly(ADP-ribose) polymerase-1 (PARP-1). Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 22090-22095.	7.1	141
51	Protection against Methylation-induced Cytotoxicity by DNA Polymerase Î²-Dependent Long Patch Base Excision Repair. Journal of Biological Chemistry, 2000, 275, 2211-2218.	3.4	138
52	Suppressed catalytic activity of base excision repair enzymes on rotationally positioned uracil in nucleosomes. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 7465-7470.	7.1	138
53	Expression of human DNA polymerase .beta. in Escherichia coli and characterization of the recombinant enzyme. Biochemistry, 1988, 27, 901-909.	2.5	135
54	Functional Analysis of the Amino-terminal 8-kDa Domain of DNA Polymerase Î² as Revealed by Site-directed Mutagenesis. Journal of Biological Chemistry, 1998, 273, 11121-11126.	3.4	133

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55	Structure of DNA Polymerase Î² with the Mutagenic DNA Lesion 8-Oxodeoxyguanine Reveals Structural Insights into Its Coding Potential. Structure, 2003, 11, 121-127.	3.3	133
56	Uncovering the polymerase-induced cytotoxicity of an oxidized nucleotide. Nature, 2015, 517, 635-639.	27.8	133
57	Structural design of a eukaryotic DNA repair polymerase: DNA polymerase Î². Mutation Research DNA Repair, 2000, 460, 231-244.	3.7	132
58	DNA Polymerase Î² and Flap Endonuclease 1 Enzymatic Specificities Sustain DNA Synthesis for Long Patch Base Excision Repair. Journal of Biological Chemistry, 2005, 280, 3665-3674.	3.4	131
59	Coordination of Steps in Single-nucleotide Base Excision Repair Mediated by Apurinic/Apyrimidinic Endonuclease 1 and DNA Polymerase Î². Journal of Biological Chemistry, 2007, 282, 13532-13541.	3.4	130
60	Substrate Channeling in Mammalian Base Excision Repair Pathways: Passing the Baton. Journal of Biological Chemistry, 2010, 285, 40479-40488.	3.4	129
61	Studies of the strand-annealing activity of mammalian hnRNP complex protein A1. Biochemistry, 1990, 29, 10717-10722.	2.5	127
62	Critical Role of Magnesium Ions in DNA Polymerase Î²'s Closing and Active Site Assembly. Journal of the American Chemical Society, 2004, 126, 8441-8453.	13.7	127
63	NEIL2-initiated, APE-independent repair of oxidized bases in DNA: Evidence for a repair complex in human cells. DNA Repair, 2006, 5, 1439-1448.	2.8	127
64	Reduced Frameshift Fidelity and Processivity of HIV-1 Reverse Transcriptase Mutants Containing Alanine Substitutions in Helix H of the Thumb Subdomain. Journal of Biological Chemistry, 1995, 270, 19516-19523.	3.4	125
65	The Fidelity of DNA Polymerase Î² during Distributive and Processive DNA Synthesis. Journal of Biological Chemistry, 1999, 274, 3642-3650.	3.4	125
66	Identification of NG-Methylarginine Residues in Human Heterogeneous RNP Protein A1:â€‰ Phe/Gly-Gly-Gly-Arg-Gly-Gly-Gly/Phe Is a Preferred Recognition Motif. Biochemistry, 1997, 36, 5185-5192.	2.5	124
67	Capturing snapshots of APE1 processing DNA damage. Nature Structural and Molecular Biology, 2015, 22, 924-931.	8.2	124
68	Eukaryotic Base Excision Repair: New Approaches Shine Light on Mechanism. Annual Review of Biochemistry, 2019, 88, 137-162.	11.1	123
69	Structures of DNA Polymerase Î² with Active-Site Mismatches Suggest a Transient Abasic Site Intermediate during Misincorporation. Molecular Cell, 2008, 30, 315-324.	9.7	122
70	Human base excision repair enzymes apurinic/apyrimidinic endonuclease1 (APE1), DNA polymerase Â and poly(ADP-ribose) polymerase 1: interplay between strand-displacement DNA synthesis and proofreading exonuclease activity. Nucleic Acids Research, 2005, 33, 1222-1229.	14.5	121
71	Stimulation of NEIL2-mediated Oxidized Base Excision Repair via YB-1 Interaction during Oxidative Stress. Journal of Biological Chemistry, 2007, 282, 28474-28484.	3.4	121
72	DNA polymerase expression differences in selected human tumors and cell lines. Carcinogenesis, 1999, 20, 1049-1054.	2.8	120

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73	Vertebrate POLQ and POLÎ² Cooperate in Base Excision Repair of Oxidative DNA Damage. Molecular Cell, 2006, 24, 115-125.	9.7	119
74	Direct Interaction between Mammalian DNA Polymerase Î² and Proliferating Cell Nuclear Antigen. Journal of Biological Chemistry, 2002, 277, 31115-31123.	3.4	118
75	Personalized Exposure Assessment: Promising Approaches for Human Environmental Health Research. Environmental Health Perspectives, 2005, 113, 840-848.	6.0	115
76	Structure and Mechanism of DNA Polymerase Î². Biochemistry, 2014, 53, 2768-2780.	2.5	115
77	The Werner Syndrome Protein Stimulates DNA Polymerase Î² Strand Displacement Synthesis via Its Helicase Activity. Journal of Biological Chemistry, 2003, 278, 22686-22695.	3.4	113
78	A minor groove binding track in reverse transcriptase. Nature Structural Biology, 1997, 4, 194-197.	9.7	111
79	Efficiency of Correct Nucleotide Insertion Governs DNA Polymerase Fidelity. Journal of Biological Chemistry, 2002, 277, 47393-47398.	3.4	108
80	Domain specific interaction in the XRCC1-DNA polymerase beta complex. Nucleic Acids Research, 2000, 28, 2049-2059.	14.5	105
81	8-OxodGTP Incorporation by DNA Polymerase Î² Is Modified by Active-Site Residue Asn279â€. Biochemistry, 2000, 39, 1029-1033.	2.5	105
82	Steady-state kinetics of mouse DNA polymerase .beta.. Biochemistry, 1979, 18, 3401-3406.	2.5	104
83	A Novel DNA Polymerase Activity Found in Association with Intracisternal A-Type Particles. Proceedings of the National Academy of Sciences of the United States of America, 1972, 69, 1531-1536.	7.1	101
84	DNA Polymerase Î» Protects Mouse Fibroblasts against Oxidative DNA Damage and Is Recruited to Sites of DNA Damage/Repair. Journal of Biological Chemistry, 2005, 280, 31641-31647.	3.4	101
85	Coordination between Polymerase Î² and FEN1 Can Modulate CAG Repeat Expansion. Journal of Biological Chemistry, 2009, 284, 28352-28366.	3.4	100
86	Modifying the Î²,Î³ Leaving-Group Bridging Oxygen Alters Nucleotide Incorporation Efficiency, Fidelity, and the Catalytic Mechanism of DNA Polymerase Î²â€. Biochemistry, 2007, 46, 461-471.	2.5	99
87	DNA base excision repair: a mechanism of trinucleotide repeat expansion. Trends in Biochemical Sciences, 2012, 37, 162-172.	7.5	99
88	DNA polymerase III of mouse myeloma. Partial purification and characterization. Biochemistry, 1975, 14, 1006-1020.	2.5	98
89	HMGB1: Roles in base excision repair and related function. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2010, 1799, 119-130.	1.9	98
90	Identification and properties of the catalytic domain of mammalian DNA polymerase .beta.. Biochemistry, 1990, 29, 7156-7159.	2.5	97

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91	Environmental health and genomics: visions and implications. Nature Reviews Genetics, 2000, 1, 149-153.	16.3	97
92	Increased postischemic brain injury in mice deficient in uracil-DNA glycosylase. Journal of Clinical Investigation, 2004, 113, 1711-1721.	8.2	96
93	[10] Enzymes for modifying and labeling DNA and RNA. Methods in Enzymology, 1987, 152, 94-110.	1.0	94
94	Structural insights into DNA polymerase Î² fidelity: hold tight if you want it right. Chemistry and Biology, 1998, 5, R7-R13.	6.0	92
95	Human DNA polymerase Â possesses 5'-dRP lyase activity and functions in single-nucleotide base excision repair in vitro. Nucleic Acids Research, 2009, 37, 1868-1877.	14.5	92
96	Interactions of the A1 heterogeneous nuclear ribonucleoprotein and its proteolytic derivative, UP1, with RNA and DNA: Evidence for multiple RNA binding domains and salt-dependent binding mode transitions. Biochemistry, 1991, 30, 2968-2976.	2.5	91
97	Structure of rat DNA polymerase beta revealed by partial amino acid sequencing and cDNA cloning.. Proceedings of the National Academy of Sciences of the United States of America, 1986, 83, 5106-5110.	7.1	89
98	Hypersensitivity of DNA polymerase Î² null mouse fibroblasts reflects accumulation of cytotoxic repair intermediates from site-specific alkyl DNA lesions. DNA Repair, 2003, 2, 27-48.	2.8	88
99	Energy analysis of chemistry for correct insertion by DNA polymerase beta. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 13294-13299.	7.1	88
100	Sequence of human DNA polymerase Î² mRNA obtained through cDNA cloning. Biochemical and Biophysical Research Communications, 1986, 136, 341-347.	2.1	87
101	Mechanism of HIV reverse transcriptase: enzyme-primer interaction as revealed through studies of a dNTP analog, 3'-azido-dTTP. Biochemistry, 1990, 29, 3603-3611.	2.5	87
102	Up-regulation of base excision repair correlates with enhanced protection against a DNA damaging agent in mouse cell lines. Nucleic Acids Research, 1998, 26, 2001-2007.	14.5	87
103	Polymerase Î² simulations suggest that Arg258 rotation is a slow step rather than large subdomain motions per se 1 1Edited by B. Honig. Journal of Molecular Biology, 2002, 317, 651-671.	4.2	87
104	Strategic down-regulation of DNA polymerase Î² by antisense RNA sensitizes mammalian cells to specific DNA damaging agents. Nucleic Acids Research, 1995, 23, 3810-3815.	14.5	86
105	Ochratoxin A-Induced Mutagenesis in Mammalian Cells Is Consistent with the Production of Oxidative Stress. Chemical Research in Toxicology, 2007, 20, 1031-1037.	3.3	86
106	Folate Deficiency Induces Neurodegeneration and Brain Dysfunction in Mice Lacking Uracil DNA Glycosylase. Journal of Neuroscience, 2008, 28, 7219-7230.	3.6	86
107	Identification of Small Molecule Synthetic Inhibitors of DNA Polymerase Î² by NMR Chemical Shift Mapping. Journal of Biological Chemistry, 2004, 279, 39736-39744.	3.4	85
108	Mutations associated with base excision repair deficiency and methylation-induced genotoxic stress. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 6860-6865.	7.1	82

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109	AP endonuclease and poly(ADP-ribose) polymerase-1 interact with the same base excision repair intermediate. DNA Repair, 2004, 3, 581-591.	2.8	82
110	Structural Insights into DNA Polymerase Î² Deterrents for Misincorporation Support an Induced-Fit Mechanism for Fidelity. Structure, 2004, 12, 1823-1832.	3.3	81
111	Suicidal cross-linking of PARP-1 to AP site intermediates in cells undergoing base excision repair. Nucleic Acids Research, 2014, 42, 6337-6351.	14.5	81
112	Genomic and evolutionary classification of lung cancer in never smokers. Nature Genetics, 2021, 53, 1348-1359.	21.4	81
113	Studies on DNA Î±-polymerase of mouse myeloma: partial purification and comparison of three molecular forms of the enzyme. Biochemistry, 1976, 15, 5305-5314.	2.5	80
114	Characterization of DNA polymerase Î² mRNA: cell-cycle and growth response in cultured human cells. Nucleic Acids Research, 1988, 16, 9587-9596.	14.5	80
115	Protein-protein interactions of HIV-1 reverse transcriptase: implication of central and C-terminal regions in subunit binding. Biochemistry, 1991, 30, 11707-11719.	2.5	80
116	Binary complex crystal structure of DNA polymerase Î² reveals multiple conformations of the templating 8-oxoguanine lesion. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 113-118.	7.1	80
117	Base excision repair deficiency caused by polymerase beta haploinsufficiency: accelerated DNA damage and increased mutational response to carcinogens. Cancer Research, 2003, 63, 5799-807.	0.9	80
118	Yeast open reading frame YCR14C encodes a DNA Î²-polymerase-like enzyme. Nucleic Acids Research, 1993, 21, 5301-5307.	14.5	79
119	Magnesium-cationic Dummy Atom Molecules Enhance Representation of DNA Polymerase Î² in Molecular Dynamics Simulations: Improved Accuracy in Studies of Structural Features and Mutational Effects. Journal of Molecular Biology, 2007, 366, 687-701.	4.2	79
120	DNA Polymerase Î² Fidelity:â€‰ Halomethylene-Modified Leaving Groups in Pre-Steady-State Kinetic Analysis Reveal Differences at the Chemical Transition State. Biochemistry, 2008, 47, 870-879.	2.5	79
121	DNA polymerase structure-based insight on the mutagenic properties of 8-oxoguanine. Mutation Research - Genetic Toxicology and Environmental Mutagenesis, 2010, 703, 18-23.	1.7	79
122	Mammalian DNA Î²-polymerase in base excision repair of alkylation damage. Progress in Molecular Biology and Translational Science, 2001, 68, 57-74.	1.9	77
123	Backbone dynamics and refined solution structure of the N-terminal domain of DNA polymerase Î². Correlation with DNA binding and dRP lyase activity 1 1Edited by P. E. Wright. Journal of Molecular Biology, 2000, 296, 229-253.	4.2	74
124	Involvement of DNA polymerase Î² in protection against the cytotoxicity of oxidative DNA damage. DNA Repair, 2002, 1, 317-333.	2.8	73
125	DNA Polymerases Î² and Î» Mediate Overlapping and Independent Roles in Base Excision Repair in Mouse Embryonic Fibroblasts. PLoS ONE, 2010, 5, e12229.	2.5	73
126	Structural insight into the DNA polymerase Î² deoxyribose phosphate lyase mechanism. DNA Repair, 2005, 4, 1347-1357.	2.8	71

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127	PARP1 changes from three-dimensional DNA damage searching to one-dimensional diffusion after auto-PARylation or in the presence of APE1. Nucleic Acids Research, 2017, 45, 12834-12847.	14.5	71
128	Mapping of the 5â€²-2-Deoxyribose-5-phosphate Lyase Active Site in DNA Polymerase Î² by Mass Spectrometry. Journal of Biological Chemistry, 2000, 275, 10463-10471.	3.4	69
129	Loss of DNA Polymerase Î² Stacking Interactions with Templating Purines, but Not Pyrimidines, Alters Catalytic Efficiency and Fidelity. Journal of Biological Chemistry, 2002, 277, 8235-8242.	3.4	68
130	Influence of DNA Structure on DNA Polymerase Î² Active Site Function. Journal of Biological Chemistry, 2004, 279, 31921-31929.	3.4	68
131	Base Excision Repair Defects Invoke Hypersensitivity to PARP Inhibition. Molecular Cancer Research, 2014, 12, 1128-1139.	3.4	68
132	Thermodynamics of Human DNA Ligase I Trimerization and Association with DNA Polymerase Î². Journal of Biological Chemistry, 1998, 273, 20540-20550.	3.4	67
133	Intrinsic mutagenic properties of 5-chlorocytosine: A mechanistic connection between chronic inflammation and cancer. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E4571-80.	7.1	67
134	Improved conditions for activity gel analysis of DNA polymerase catalytic polypeptides. Analytical Biochemistry, 1983, 135, 318-325.	2.4	66
135	Regulation of DNA Repair Fidelity by Molecular Checkpoints:Â â€œGatesâ€•in DNA Polymerase Î²'s Substrate Selectionâ€. Biochemistry, 2006, 45, 15142-15156.	2.5	66
136	Physiology of rat-liver polysomes. Protein synthesis by stable polysomes. Biochemical Journal, 1967, 103, 567-572.	2.8	65
137	Localization of the Deoxyribose Phosphate Lyase Active Site in Human DNA Polymerase Î¹ by Controlled Proteolysis. Journal of Biological Chemistry, 2003, 278, 29649-29654.	3.4	65
138	Haploinsufficiency in DNA Polymerase Î² Increases Cancer Risk with Age and Alters Mortality Rate. Cancer Research, 2006, 66, 7460-7465.	0.9	65
139	DNA Polymerase Î² Ribonucleotide Discrimination. Journal of Biological Chemistry, 2010, 285, 24457-24465.	3.4	64
140	Damage sensor role of UV-DDB during base excision repair. Nature Structural and Molecular Biology, 2019, 26, 695-703.	8.2	64
141	Mammalian Heterogeneous Ribonucleoprotein A1 and its Constituent Domains. Journal of Molecular Biology, 1993, 229, 873-889.	4.2	61
142	Increased PARP-1 Association with DNA in Alkylation Damaged, PARP-Inhibited Mouse Fibroblasts. Molecular Cancer Research, 2012, 10, 360-368.	3.4	61
143	â€œAction-at-a-Distanceâ€•Mutagenesis. Journal of Biological Chemistry, 1999, 274, 15920-15926.	3.4	60
144	DNA Polymerase Î² Substrate Specificity. Journal of Biological Chemistry, 2009, 284, 31680-31689.	3.4	60

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145	DNA Synthesis and dRPase Activities of Polymerase Î² Are Both Essential for Single-Nucleotide Patch Base Excision Repair in Mammalian Cell Extracts. Biochemistry, 2001, 40, 809-813.	2.5	58
146	Poly(ADP-ribose) Polymerase Activity Prevents Signaling Pathways for Cell Cycle Arrest after DNA Methylating Agent Exposure. Journal of Biological Chemistry, 2005, 280, 15773-15785.	3.4	57
147	Mismatch-Induced Conformational Distortions in Polymerase Î² Support an Induced-Fit Mechanism for Fidelityâ€. Biochemistry, 2005, 44, 13328-13341.	2.5	57
148	[77] Cultured cell systems and methods for neurobiology. Methods in Enzymology, 1974, 32, 765-788.	1.0	56
149	Localization of a polynucleotide binding region in the HIV-1 reverse transcriptase: implications for primer binding. Biochemistry, 1991, 30, 10623-10631.	2.5	56
150	DNA polymerase beta and DNA synthesis in Xenopus oocytes and in a nuclear extract. Science, 1992, 258, 475-478.	12.6	56
151	Different structural states in oligonucleosomes are required for early versus late steps of base excision repair. Nucleic Acids Research, 2007, 35, 4313-4321.	14.5	56
152	Transcriptional mutagenesis mediated by 8-oxoG induces translational errors in mammalian cells. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 4218-4222.	7.1	56
153	Kinetic analysis of template-primer interactions with recombinant forms of HIV-1 reverse transcriptase. Biochemistry, 1993, 32, 9745-9753.	2.5	55
154	Activities and Mechanism of DNA Polymerase Î². Methods in Enzymology, 2006, 408, 91-107.	1.0	55
155	Purification and characterization of the RNase H domain of HIV-1 reverse transcriptase expressed in recombinantEscherichia coli. FEBS Letters, 1990, 270, 76-80.	2.8	54
156	Three-Dimensional Solution Structure of the N-Terminal Domain of DNA Polymerase Î² and Mapping of the ssDNA Interaction Interfaceâ€,â€¡. Biochemistry, 1996, 35, 6188-6200.	2.5	54
157	Minor Groove Interactions at the DNA Polymerase Î² Active Site Modulate Single-base Deletion Error Rates. Journal of Biological Chemistry, 2000, 275, 28033-28038.	3.4	54
158	Local Deformations Revealed by Dynamics Simulations of DNA Polymerase Î² with DNA Mismatches at the Primer Terminus. Journal of Molecular Biology, 2002, 321, 459-478.	4.2	54
159	DNA polymerase Î². International Journal of Biochemistry and Cell Biology, 2002, 34, 321-324.	2.8	54
160	(R)-Î²,Î³-Fluoromethylene-dGTP-DNA Ternary Complex with DNA Polymerase Î². Journal of the American Chemical Society, 2007, 129, 15412-15413.	13.7	54
161	Hypersensitivity phenotypes associated with genetic and synthetic inhibitor-induced base excision repair deficiency. DNA Repair, 2007, 6, 530-543.	2.8	54
162	Pol Î² associated complex and base excision repair factors in mouse fibroblasts. Nucleic Acids Research, 2012, 40, 11571-11582.	14.5	54

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163	Time-lapse crystallography snapshots of a double-strand break repair polymerase in action. Nature Communications, 2017, 8, 253.	12.8	54
164	The ATF/CREB transcription factor-binding site in the polymerase beta promoter mediates the positive effect of N-methyl-N'-nitro-N-nitrosoguanidine on transcription.. Proceedings of the National Academy of Sciences of the United States of America, 1991, 88, 3729-3733.	7.1	53
165	DNA polymerases on the move. Nature Structural Biology, 1998, 5, 95-99.	9.7	53
166	Subunits of human replication protein A are crosslinked by photoreactive primers synthesized by DNA polymerases. Nucleic Acids Research, 1998, 26, 602-607.	14.5	53
167	Dynamic Characterization of a DNA Repair Enzyme:Â NMR Studies of [methyl-13C]Methionine-Labeled DNA Polymerase Î². Biochemistry, 2004, 43, 8911-8922.	2.5	53
168	A real-time fluorescence method for enzymatic characterization of specialized human DNA polymerases. Nucleic Acids Research, 2009, 37, e128-e128.	14.5	53
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