Satya Prakash

List of Publications by Year
in descending order

224 papers	21,082 citations	7096 78 h-index	11607 135 g-index
225 all docs	225 docs citations	225 times ranked	6906 citing authors

#	Article	IF	Citations
1	EUKARYOTIC TRANSLESION SYNTHESIS DNA POLYMERASES: Specificity of Structure and Function. Annual Review of Biochemistry, 2005, 74, 317-353.	11.1	919
2	The Y-Family of DNA Polymerases. Molecular Cell, 2001, 8, 7-8.	9.7	798
3	hRAD30 Mutations in the Variant Form of Xeroderma Pigmentosum. Science, 1999, 285, 263-265.	12.6	712
4	Eukaryotic polymerases Î¹ and Î¶ act sequentially to bypass DNA lesions. Nature, 2000, 406, 1015-1019.	27.8	622
5	Fidelity of Human DNA Polymerase Î·. Journal of Biological Chemistry, 2000, 275, 7447-7450.	3.4	365
6	Structure of the Catalytic Core of S. cerevisiae DNA Polymerase Î·. Molecular Cell, 2001, 8, 417-426.	9.7	347
7	Efficient and accurate replication in the presence of 7,8-dihydro-8-oxoguanine by DNA polymerase Î·. Nature Genetics, 2000, 25, 458-461.	21.4	342
8	Nucleotide excision repair in yeast. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2000, 451, 13-24.	1.0	318
9	Roles of yeast DNA polymerases delta and zeta and of Rev1 in the bypass of abasic sites. Genes and Development, 2001, 15, 945-954.	5.9	313
10	Eukaryotic DNA Polymerases: Proposal for a Revised Nomenclature. Journal of Biological Chemistry, 2001, 276, 43487-43490.	3.4	307
11	Human xeroderma pigmentosum group D gene encodes a DMA helicase. Nature, 1993, 365, 852-855.	27.8	304
12	Replication by human DNA polymerase-Î¹ occurs by Hoogsteen base-pairing. Nature, 2004, 430, 377-380.	27.8	300
13	DNA Repair Genes and Proteins of Saccharomyces Cerevisiae. Annual Review of Genetics, 1993, 27, 33-70.	7.6	298
14	Translesion DNA synthesis in eukaryotes: A one- or two-polymerase affair. Genes and Development, 2002, 16, 1872-1883.	5.9	296
15	Yeast DNA Repair Proteins Rad6 and Rad18 Form a Heterodimer That Has Ubiquitin Conjugating, DNA Binding, and ATP Hydrolytic Activities. Journal of Biological Chemistry, 1997, 272, 23360-23365.	3.4	268
16	EFFECTS OF THE <i>RAD52</i> GENE ON RECOMBINATION IN <i>SACCHAROMYCES CEREVISIAE</i>. Genetics, 1980, 94, 31-50.	2.9	257
17	Yeast Rad5 Protein Required for Postreplication Repair Has a DNA Helicase Activity Specific for Replication Fork Regression. Molecular Cell, 2007, 28, 167-175.	9.7	252
18	Structural basis of high-fidelity DNA synthesis by yeast DNA polymerase Î´. Nature Structural and Molecular Biology, 2009, 16, 979-986.	8.2	236

#	Article	IF	Citations
19	Physical and Functional Interactions of Human DNA Polymerase Î· with PCNA. Molecular and Cellular Biology, 2001, 21, 7199-7206.	2.3	231
20	ISOLATION AND CHARACTERIZATION OF MMS-SENSITIVE MUTANTS OF <i>SACCHAROMYCES CEREVISIAE</i>. Genetics, 1977, 86, 33-55.	2.9	230
21	Rev1 Employs a Novel Mechanism of DNA Synthesis Using a Protein Template. Science, 2005, 309, 2219-2222.	12.6	224
22	Reconstitution of Yeast Nucleotide Excision Repair with Purified Rad Proteins, Replication Protein A, and Transcription Factor TFIIH. Journal of Biological Chemistry, 1995, 270, 12973-12976.	3.4	223
23	Human DNA Polymerase Îº Encircles DNA: Implications for Mismatch Extension and Lesion Bypass. Molecular Cell, 2007, 25, 601-614.	9.7	214
24	Human SHPRH is a ubiquitin ligase for Mms2-Ubc13-dependent polyubiquitylation of proliferating cell nuclear antigen. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 18107-18112.	7.1	204
25	Human HLTF functions as a ubiquitin ligase for proliferating cell nuclear antigen polyubiquitination. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 3768-3773.	7.1	201
26	RAD25 is a DMA helicase required for DNA repair and RNA polymerase II transcription. Nature, 1994, 369, 578-581.	27.8	199
27	Interaction with PCNA Is Essential for Yeast DNA Polymerase Î· Function. Molecular Cell, 2001, 8, 407-415.	9.7	199
28	Evidence for Involvement of Yeast Proliferating Cell Nuclear Antigen in DNA Mismatch Repair. Journal of Biological Chemistry, 1996, 271, 27987-27990.	3.4	197
29	Role of DNA Polymerase Î· in the Bypass of a (6-4) TT Photoproduct. Molecular and Cellular Biology, 2001, 21, 3558-3563.	2.3	190
30	Opposing Effects of Ubiquitin Conjugation and SUMO Modification of PCNA on Replicational Bypass of DNA Lesions in Saccharomyces cerevisiae. Molecular and Cellular Biology, 2004, 24, 4267-4274.	2.3	189
31	Requirement of the Yeast MSH3 and MSH6 Genes for MSH2-dependent Genomic Stability. Journal of Biological Chemistry, 1996, 271, 7285-7288.	3.4	184
32	Conditional Lethality of Null Mutations in RTH1 That Encodes the Yeast Counterpart of a Mammalian 5â€²- to 3â€²-Exonuclease Required for Lagging Strand DNA Synthesis in Reconstituted Systems. Journal of Biological Chemistry, 1995, 270, 4193-4196.	3.4	172
33	Stimulation of DNA Synthesis Activity of Human DNA Polymerase Îº by PCNA. Molecular and Cellular Biology, 2002, 22, 784-791.	2.3	171
34	A Major Role of DNA Polymerase Î´ in Replication of Both the Leading and Lagging DNA Strands. Molecular Cell, 2015, 59, 163-175.	9.7	170
35	Fidelity and Processivity of Saccharomyces cerevisiae DNA Polymerase Î·. Journal of Biological Chemistry, 1999, 274, 36835-36838.	3.4	169
36	Requirement of RAD5 and MMS2 for Postreplication Repair of UV-Damaged DNA in Saccharomyces cerevisiae. Molecular and Cellular Biology, 2002, 22, 2419-2426.	2.3	164

#	Article	IF	Citations
37	Pol31 and Pol32 subunits of yeast DNA polymerase Î´ are also essential subunits of DNA polymerase Î¶. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 12455-12460.	7.1	159
38	Human DINB1-encoded DNA polymerase Â is a promiscuous extender of mispaired primer termini. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 1910-1914.	7.1	157
39	Role of human DNA polymerase Â as an extender in translesion synthesis. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 16000-16005.	7.1	153
40	DNA repair gene RAD3 of S. cerevisiae is essential for transcription by RNA polymerase II. Nature, 1994, 367, 91-94.	27.8	150
41	Binding of insertion/deletion DNA mismatches by the heterodimer of yeast mismatch repair proteins MSH2 and MSH3. Current Biology, 1996, 6, 1185-1187.	3.9	150
42	Yeast Rev1 Protein Is a G Template-specific DNA Polymerase. Journal of Biological Chemistry, 2002, 277, 15546-15551.	3.4	144
43	Requirement of Yeast SGS1 and SRS2 Genes for Replication and Transcription. Science, 1999, 286, 2339-2342.	12.6	141
44	Yeast excision repair gene RAD2 encodes a single-stranded DNA endonuclease. Nature, 1993, 366, 365-368.	27.8	137
45	Replication past O 6 -Methylguanine by Yeast and Human DNA Polymerase Î·. Molecular and Cellular Biology, 2000, 20, 8001-8007.	2.3	137
46	Structural basis for the suppression of skin cancers by DNA polymerase Î·. Nature, 2010, 465, 1039-1043.	27.8	136
47	Highly error-free role of DNA polymerase Î· in the replicative bypass of UV-induced pyrimidine dimers in mouse and human cells. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 18219-18224.	7.1	135
48	Requirement of Mismatch Repair Genes <i>MSH2</i> and <i>MSH3</i> in the <i>RAD1-RAD10</i> Pathway of Mitotic Recombination in <i>Saccharomyces cerevisiae</i>. Genetics, 1996, 142, 727-736.	2.9	132
49	Requirement of DNA Polymerase Î· for Error-Free Bypass of UV-Induced CC and TC Photoproducts. Molecular and Cellular Biology, 2001, 21, 185-188.	2.3	129
50	Yeast DNA Polymerase Î· Utilizes an Induced-Fit Mechanism of Nucleotide Incorporation. Cell, 2001, 107, 917-927.	28.9	126
51	Ubiquitylation of yeast proliferating cell nuclear antigen and its implications for translesion DNA synthesis. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 6477-6482.	7.1	124
52	ORIGIN OF REPRODUCTIVE ISOLATION IN THE ABSENCE OF APPARENT GENIC DIFFERENTIATION IN A GEOGRAPHIC ISOLATE OF <i>DROSOPHILA PSEUDOOBSCURA</i>. Genetics, 1972, 72, 143-155.	2.9	124
53	Human DNA Polymerase Î¹ Incorporates dCTP Opposite Template G via a G.C+ Hoogsteen Base Pair. Structure, 2005, 13, 1569-1577.	3.3	120
54	Regulation of polymerase exchange between PolÎ· and PolÎ´ by monoubiquitination of PCNA and the movement of DNA polymerase holoenzyme. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 5361-5366.	7.1	117

#	Article	IF	Citations
55	ATP-dependent Assembly of a Ternary Complex Consisting of a DNA Mismatch and the Yeast MSH2-MSH6 and MLH1-PMS1 Protein Complexes. Journal of Biological Chemistry, 1998, 273, 9837-9841.	3.4	115
56	Efficient and Error-Free Replication Past a Minor-Groove DNA Adduct by the Sequential Action of Human DNA Polymerases Î¹ and Îº. Molecular and Cellular Biology, 2004, 24, 5687-5693.	2.3	114
57	Complex Formation with Rev1 Enhances the Proficiency of Saccharomyces cerevisiae DNA Polymerase Î¶ for Mismatch Extension and for Extension Opposite from DNA Lesions. Molecular and Cellular Biology, 2006, 26, 9555-9563.	2.3	114
58	YeastRAD14 and human xeroderma pigmentosum group A DNA-repair genes encode homologous proteins. Nature, 1992, 355, 555-558.	27.8	112
59	Affinity of Yeast Nucleotide Excision Repair Factor 2, Consisting of the Rad4 and Rad23 Proteins, for Ultraviolet Damaged DNA. Journal of Biological Chemistry, 1998, 273, 31541-31546.	3.4	107
60	Crystal Structure of the Catalytic Core of Human DNA Polymerase Kappa. Structure, 2004, 12, 1395-1404.	3.3	107
61	Requirement of DNA Polymerase Activity of Yeast Rad30 Protein for Its Biological Function. Journal of Biological Chemistry, 1999, 274, 15975-15977.	3.4	106
62	Roles of PCNA-binding and ubiquitin-binding domains in human DNA polymerase Î· in translesion DNA synthesis. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 17724-17729.	7.1	106
63	Inefficient Bypass of an Abasic Site by DNA Polymerase Î·. Journal of Biological Chemistry, 2001, 276, 6861-6866.	3.4	105
64	Yeast DNA Polymerase Î¶ Is an Efficient Extender of Primer Ends Opposite from 7,8-Dihydro-8-Oxoguanine and O 6 -Methylguanine. Molecular and Cellular Biology, 2003, 23, 1453-1459.	2.3	105
65	Hoogsteen base pair formation promotes synthesis opposite the 1,N6-ethenodeoxyadenosine lesion by human DNA polymerase Î¹. Nature Structural and Molecular Biology, 2006, 13, 619-625.	8.2	105
66	An Affinity of Human Replication Protein A for Ultraviolet-damaged DNA. Journal of Biological Chemistry, 1996, 271, 11607-11610.	3.4	104
67	Mms2-Ubc13-Dependent and -Independent Roles of Rad5 Ubiquitin Ligase in Postreplication Repair and Translesion DNA Synthesis in Saccharomyces cerevisiae. Molecular and Cellular Biology, 2006, 26, 7783-7790.	2.3	100
68	Efficient and Error-Free Replication past a Minor-Groove N 2 -Guanine Adduct by the Sequential Action of Yeast Rev1 and DNA Polymerase Î¶. Molecular and Cellular Biology, 2004, 24, 6900-6906.	2.3	99
69	The Stalling of Transcription at Abasic Sites Is Highly Mutagenic. Molecular and Cellular Biology, 2003, 23, 382-388.	2.3	97
70	The nucleotide sequence of theRAD3gene ofSaccharomyces cerevisiae: a potential adenine nucleotide binding amino acid sequence and a nonessential acidic carboxyl terminal region. Nucleic Acids Research, 1985, 13, 2357-2372.	14.5	96
71	Requirement of Yeast RAD2, a Homolog of Human XPG Gene, for Efficient RNA Polymerase II Transcription. Cell, 2002, 109, 823-834.	28.9	94
72	Yeast DNA polymerase zeta (zeta) is essential for error-free replication past thymine glycol. Genes and Development, 2003, 17, 77-87.	5.9	92

#	Article	IF	Citations
73	Requirement of <i>RAD52</i> Group Genes for Postreplication Repair of UV-Damaged DNA in <i>Saccharomyces cerevisiae</i>. Molecular and Cellular Biology, 2007, 27, 7758-7764.	2.3	89
74	Nucleotide Excision Repair in Yeast Is Mediated by Sequential Assembly of Repair Factors and Not by a Pre-assembled Repairosome. Journal of Biological Chemistry, 1996, 271, 8903-8910.	3.4	87
75	PATTERNS OF GENE VARIATION IN CENTRAL AND MARGINAL POPULATIONS OF <i>DROSOPHILA ROBUSTA</i>. Genetics, 1973, 75, 347-369.	2.9	85
76	Requirement of Watson-Crick Hydrogen Bonding for DNA Synthesis by Yeast DNA Polymerase Î·. Molecular and Cellular Biology, 2003, 23, 5107-5112.	2.3	83
77	Recombination and mutagenesis in rad6 mutants of Saccharomyces cerevisiae: Evidence for multiple functions of the RAD6 gene. Molecular Genetics and Genomics, 1981, 184, 410-415.	2.4	82
78	Yeast Rad7-Rad16 Complex, Specific for the Nucleotide Excision Repair of the Nontranscribed DNA Strand, Is an ATP-dependent DNA Damage Sensor. Journal of Biological Chemistry, 1997, 272, 21665-21668.	3.4	81
79	Enhancement of MSH2â€"MSH3-mediated mismatch recognition by the yeast MLH1â€"PMS1 complex. Current Biology, 1997, 7, 790-793.	3.9	81
80	Defective excision of pyrimidine dimers and interstrand DNA crosslinks in rad7 and rad23 mutants of Saccharomyces cerevisiae. Molecular Genetics and Genomics, 1982, 188, 235-239.	2.4	78
81	Evidence for the Involvement of Nucleotide Excision Repair in the Removal of Abasic Sites in Yeast. Molecular and Cellular Biology, 2000, 20, 3522-3528.	2.3	78
82	Translesion Synthesis past Acrolein-derived DNA Adduct, Î³-Hydroxypropanodeoxyguanosine, by Yeast and Human DNA Polymerase Î·. Journal of Biological Chemistry, 2003, 278, 784-790.	3.4	78
83	Mechanism of nucleotide incorporation opposite a thymine-thymine dimer by yeast DNA polymerase Â. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 12093-12098.	7.1	78
84	Yeast DNA Repair Protein RAD23 Promotes Complex Formation between Transcription Factor TFIIH and DNA Damage Recognition Factor RAD14. Journal of Biological Chemistry, 1995, 270, 8385-8388.	3.4	77
85	Complex Formation of Yeast Rev1 and Rev7 Proteins: a Novel Role for the Polymerase-Associated Domain. Molecular and Cellular Biology, 2005, 25, 9734-9740.	2.3	77
86	Mutational specificity and genetic control of replicative bypass of an abasic site in yeast. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 1170-1175.	7.1	77
87	Error-Prone Replication through UV Lesions by DNA Polymerase Î¸ Protects against Skin Cancers. Cell, 2019, 176, 1295-1309.e15.	28.9	77
88	Three additional genes involved in pyrimidine dimer removal in Saccharomyces cerevisiae: RAD7, RAD14 and MMS19. Molecular Genetics and Genomics, 1979, 176, 351-359.	2.4	75
89	Biochemical evidence for the requirement of Hoogsteen base pairing for replication by human DNA polymerase Â. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 10466-10471.	7.1	75
90	Expression of theSaccharomyces cerevisiaeDNA repair geneRAD6that encodes a ubiquitin conjugating enzyme, increases in response to DNA damage and in meiosis but remains constant during the mitotic cell cycle. Nucleic Acids Research, 1990, 18, 771-778.	14.5	72

#	Article	IF	Citations
91	Structural basis for cisplatin DNA damage tolerance by human polymerase Î· during cancer chemotherapy. Nature Structural and Molecular Biology, 2012, 19, 628-632.	8.2	72
92	Crystal Structure of the Saccharomyces cerevisiae Ubiquitin-conjugating Enzyme Rad6 at 2.6 Ã… Resolution. Journal of Biological Chemistry, 1998, 273, 6271-6276.	3.4	70
93	Apurinic Endonuclease Activity of Yeast Apn2 Protein. Journal of Biological Chemistry, 2000, 275, 22427-22434.	3.4	70
94	Error-free replicative bypass of (6â€“4) photoproducts by DNA polymerase Î¶ in mouse and human cells. Genes and Development, 2010, 24, 123-128.	5.9	70
95	PCNA binding domains in all three subunits of yeast DNA polymerase Î´ modulate its function in DNA replication. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 17927-17932.	7.1	69
96	Dpo4 is hindered in extending a GÂ·T mismatch by a reverse wobble. Nature Structural and Molecular Biology, 2004, 11, 457-462.	8.2	68
97	ELA1 and CUL3 Are Required Along with ELC1 for RNA Polymerase II Polyubiquitylation and Degradation in DNA-Damaged Yeast Cells. Molecular and Cellular Biology, 2007, 27, 3211-3216.	2.3	68
98	Structure of the Human Rev1â€“DNAâ€“dNTP Ternary Complex. Journal of Molecular Biology, 2009, 390, 699-709.	4.2	67
99	3â€²-Phosphodiesterase and 3â€²â†’5â€² Exonuclease Activities of Yeast Apn2 Protein and Requirement of These Activities for Repair of Oxidative DNA Damage. Molecular and Cellular Biology, 2001, 21, 1656-1661.	2.3	66
100	Transcript levels of theSaccharomyes cerevisiaeDNA repair geneRAD23increase in response to UV light andin meiosis but remain constant in the mitotic cell cycle. Nucleic Acids Research, 1990, 18, 4737-4742.	14.5	65
101	Structure and mechanism of human PrimPol, a DNA polymerase with primase activity. Science Advances, 2016, 2, e1601317.	10.3	65
102	RAD26, the Yeast Homolog of Human Cockayne's Syndrome Group B Gene, Encodes a DNA-dependent ATPase. Journal of Biological Chemistry, 1996, 271, 18314-18317.	3.4	64
103	Requirement of Rad5 for DNA Polymerase Î¶-Dependent Translesion Synthesis in <i>Saccharomyces cerevisiae</i>. Genetics, 2008, 180, 73-82.	2.9	64
104	Error-free replicative bypass of thymine glycol by the combined action of DNA polymerases Îº and Î¶ in human cells. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 14116-14121.	7.1	64
105	Requirement for Yeast RAD26 , a Homolog of the Human CSB Gene, in Elongation by RNA Polymerase II. Molecular and Cellular Biology, 2001, 21, 8651-8656.	2.3	63
106	Reconstitution of TFIIH and Requirement of Its DNA Helicase Subunits, Rad3 and Rad25, in the Incision Step of Nucleotide Excision Repair. Journal of Biological Chemistry, 1996, 271, 10821-10826.	3.4	61
107	A Role for Yeast and Human Translesion Synthesis DNA Polymerases in Promoting Replication through 3-Methyl Adenine. Molecular and Cellular Biology, 2007, 27, 7198-7205.	2.3	61
108	An Incoming Nucleotide Imposes an anti to syn Conformational Change on the Templating Purine in the Human DNA Polymerase-Î¹ Active Site. Structure, 2006, 14, 749-755.	3.3	60

#	Article	IF	Citations
109	Protein-Template-Directed Synthesis across an Acrolein-Derived DNA Adduct by Yeast Rev1 DNA Polymerase. Structure, 2008, 16, 239-245.	3.3	59
110	Stable ester conjugate between the Saccharomyces cerevisiae RAD6 protein and ubiquitin has no biological activity. Journal of Molecular Biology, 1991, 221, 745-749.	4.2	57
111	Stimulation of 3â€²â†’5â€² Exonuclease and 3â€²-Phosphodiesterase Activities of Yeast Apn2 by Proliferating Cell Nuclear Antigen. Molecular and Cellular Biology, 2002, 22, 6480-6486.	2.3	57
112	Human DNA Polymerase Î¹ Utilizes Different Nucleotide Incorporation Mechanisms Dependent upon the Template Base. Molecular and Cellular Biology, 2004, 24, 936-943.	2.3	57
113	A Single Domain in Human DNA Polymerase Î¹ Mediates Interaction with PCNA: Implications for Translesion DNA Synthesis. Molecular and Cellular Biology, 2005, 25, 1183-1190.	2.3	55
114	Yeast Rev1 protein promotes complex formation of DNA polymerase Î¶ with Pol32 subunit of DNA polymerase Î´. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 9631-9636.	7.1	54
115	Structure-specific Nuclease Activity in Yeast Nucleotide Excision Repair Protein Rad2. Journal of Biological Chemistry, 1995, 270, 30194-30198.	3.4	53
116	Evidence for a Watson-Crick Hydrogen Bonding Requirement in DNA Synthesis by Human DNA Polymerase Îº. Molecular and Cellular Biology, 2005, 25, 7137-7143.	2.3	53
117	A Role for DNA Polymerase Î¸ in Promoting Replication through Oxidative DNA Lesion, Thymine Glycol, in Human Cells. Journal of Biological Chemistry, 2014, 289, 13177-13185.	3.4	53
118	Structure of Human DNA Polymerase Îº Inserting dATP Opposite an 8-OxoG DNA Lesion. PLoS ONE, 2009, 4, e5766.	2.5	53
119	The DNA-dependent ATPase Activity of Yeast Nucleotide Excision Repair Factor 4 and Its Role in DNA Damage Recognition. Journal of Biological Chemistry, 1998, 273, 6292-6296.	3.4	52
120	Mismatch Extension Ability of Yeast and Human DNA Polymerase Î·. Journal of Biological Chemistry, 2001, 276, 2263-2266.	3.4	51
121	Trf4 and Trf5 Proteins of Saccharomyces cerevisiae Exhibit Poly(A) RNA Polymerase Activity but No DNA Polymerase Activity. Molecular and Cellular Biology, 2005, 25, 10183-10189.	2.3	51
122	Replication past a trans -4-Hydroxynonenal Minor-Groove Adduct by the Sequential Action of Human DNA Polymerases Î¹ and Îº. Molecular and Cellular Biology, 2006, 26, 381-386.	2.3	51
123	Molecular cloning and characterization of the RAD1 gene of Saccharomyces cerevisiae. Gene, 1983, 26, 119-126.	2.2	50
124	Requirement of ELC1 for RNA Polymerase II Polyubiquitylation and Degradation in Response to DNA Damage in Saccharomyces cerevisiae. Molecular and Cellular Biology, 2006, 26, 3999-4005.	2.3	50
125	INCREASED SPONTANEOUS MITOTIC SEGREGATION IN MMS-SENSITIVE MUTANTS OF <i>SACCHAROMYCES CEREVISIAE</i>. Genetics, 1977, 87, 229-236.	2.9	50
126	Holliday junction cleavage by yeast Rad1 protein. Nature, 1994, 371, 531-534.	27.8	49

#	Article	IF	Citations
127	Complex Formation with Damage Recognition Protein Rad14 Is Essential for Saccharomyces cerevisiae Rad1-Rad10 Nuclease To Perform Its Function in Nucleotide Excision Repair In Vivo. Molecular and Cellular Biology, 2006, 26, 1135-1141.	2.3	49
128	Mutations in the Ubiquitin Binding UBZ Motif of DNA Polymerase Î· Do Not Impair Its Function in Translesion Synthesis during Replication. Molecular and Cellular Biology, 2007, 27, 7266-7272.	2.3	49
129	Requirement of yeast Rad1-Rad10 nuclease for the removal of 3'-blocked termini from DNA strand breaks induced by reactive oxygen species. Genes and Development, 2004, 18, 2283-2291.	5.9	48
130	Yeast and Human Translesion DNA Synthesis Polymerases: Expression, Purification, and Biochemical Characterization. Methods in Enzymology, 2006, 408, 390-407.	1.0	48
131	Complex Formation of Yeast Rev1 with DNA Polymerase Î·. Molecular and Cellular Biology, 2007, 27, 8401-8408.	2.3	47
132	Yeast RAD26 , a Homolog of the Human CSB Gene, Functions Independently of Nucleotide Excision Repair and Base Excision Repair in Promoting Transcription through Damaged Bases. Molecular and Cellular Biology, 2002, 22, 4383-4389.	2.3	46
133	Role of DNA damage-induced replication checkpoint in promoting lesion bypass by translesion synthesis in yeast. Genes and Development, 2009, 23, 1438-1449.	5.9	46
134	Requirement of Yeast DNA Polymerase Î´ in Post-replicational Repair of UV-damaged DNA. Journal of Biological Chemistry, 1997, 272, 25445-25448.	3.4	44
135	Acidic Residues Critical for the Activity and Biological Function of Yeast DNA Polymerase Î·. Molecular and Cellular Biology, 2001, 21, 2018-2025.	2.3	44
136	The Mechanism of Nucleotide Incorporation by Human DNA Polymerase Î· Differs from That of the Yeast Enzyme. Molecular and Cellular Biology, 2003, 23, 8316-8322.	2.3	43
137	Human DNA Polymerase Î¹ Promotes Replication through a Ring-Closed Minor-Groove Adduct That Adopts a syn Conformation in DNA. Molecular and Cellular Biology, 2005, 25, 8748-8754.	2.3	43
138	Isolation and characterization of the RAD2 gene of Saccharomyces cerevisiae. Gene, 1984, 30, 121-128.	2.2	42
139	Regulated expression of theSaccharomyces cerevisiaeDNA repair gene RAD7 in response to DNA damage and during sporulation. Nucleic Acids Research, 1990, 18, 3281-3285.	14.5	42
140	Crystal Structure of Yeast DNA Polymerase Îµ Catalytic Domain. PLoS ONE, 2014, 9, e94835.	2.5	42
141	Structure and mechanism of B-family DNA polymerase Î¶ specialized for translesion DNA synthesis. Nature Structural and Molecular Biology, 2020, 27, 913-924.	8.2	42
142	An Ironâ€"Sulfur Cluster in the Polymerase Domain of Yeast DNA Polymerase Îµ. Journal of Molecular Biology, 2014, 426, 301-308.	4.2	41
143	Renaturation of DNA catalysed by yeast DNA repair and recombination protein RAD1O. Nature, 1992, 355, 743-745.	27.8	40
144	A mechanism for the exclusion of low-fidelity human Y-family DNA polymerases from base excision repair. Genes and Development, 2003, 17, 2777-2785.	5.9	40

#	Article	IF	Citations
145	Human DNA polymerase Â uses template-primer misalignment as a novel means for extending mispaired termini and for generating single-base deletions. Genes and Development, 2003, 17, 2191-2199.	5.9	40
146	Cryo-EM structure and dynamics of eukaryotic DNA polymerase Î´ holoenzyme. Nature Structural and Molecular Biology, 2019, 26, 955-962.	8.2	40
147	Decreased UV mutagenesis in cdc8, a DNA replication mutant of Saccharomyces cerevisiae. Molecular Genetics and Genomics, 1979, 172, 249-258.	2.4	38
148	Yeast DNA polymerase Â makes functional contacts with the DNA minor groove only at the incoming nucleoside triphosphate. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 5113-5118.	7.1	38
149	Human DNA polymerase Â forms nonproductive complexes with matched primer termini but not with mismatched primer termini. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 15776-15781.	7.1	38
150	Structural Insights into Yeast DNA Polymerase Î´ by Small Angle X-ray Scattering. Journal of Molecular Biology, 2009, 394, 377-382.	4.2	38
151	DNA polymerase Â lacking the ubiquitin-binding domain promotes replicative lesion bypass in humans cells. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 10401-10405.	7.1	38
152	Human DNA Polymerase Î· Is Pre-Aligned for dNTP Binding and Catalysis. Journal of Molecular Biology, 2012, 415, 627-634.	4.2	37
153	Human DNA polymerase Î± in binary complex with a DNA:DNA template-primer. Scientific Reports, 2016, 6, 23784.	3.3	36
154	Translesion DNA Synthesis by Yeast DNA Polymerase Î· on Templates Containing N 2-Guanine Adducts of 1,3-Butadiene Metabolites. Journal of Biological Chemistry, 2001, 276, 2517-2522.	3.4	35
155	DNA Synthesis across an Abasic Lesion by Yeast Rev1 DNA Polymerase. Journal of Molecular Biology, 2011, 406, 18-28.	4.2	35
156	DIRECT EVIDENCE OF GENIC DIFFERENTIATION BETWEEN SEX RATIO AND STANDARD GENE ARRANGEMENTS OF <i>X</i> CHROMOSOME IN <i>DROSOPHILA PSEUDOOBSCURA</i>. Genetics, 1972, 72, 169-175.	2.9	35
157	GENE DIFFERENCES BETWEEN THE SEX RATIO AND STANDARD GENE ARRANGEMENTS OF THE <i>X</i> CHROMOSOME AND LINKAGE DISEQUILIBRIUM BETWEEN LOCI IN THE STANDARD GENE ARRANGEMENT OF THE <i>X</i> CHROMOSOME IN <i>DROSOPHILA PSEUDOOBSCURA</i>. Genetics, 1974, 77, 795-804.	2.9	35
158	Cloning and nucleotide sequence analysis of the Saccharomyces cerevisiaeRAD4 gene required for excision repair of UV-damaged DNA. Gene, 1988, 74, 535-541.	2.2	34
159	Rev1 promotes replication through UV lesions in conjunction with DNA polymerases Î·, Î¹, and Îº but not DNA polymerase Î¶. Genes and Development, 2015, 29, 2588-2602.	5.9	34
160	Human xeroderma pigmentosum group G gene encodes a DNA endonuclease. Nucleic Acids Research, 1994, 22, 3312-3316.	14.5	33
161	Role of Hoogsteen Edge Hydrogen Bonding at Template Purines in Nucleotide Incorporation by Human DNA Polymerase Î¹. Molecular and Cellular Biology, 2006, 26, 6435-6441.	2.3	33
162	DNA Synthesis across an Abasic Lesion by Human DNA Polymerase Î¹. Structure, 2009, 17, 530-537.	3.3	32

#	Article	IF	Citations
163	Translesion synthesis DNA polymerases promote error-free replication through the minor-groove DNA adduct 3-deaza-3-methyladenine. Journal of Biological Chemistry, 2017, 292, 18682-18688.	3.4	32
164	Molecular cloning of the RAD10 gene of Saccharomyces cerevisiae. Gene, 1985, 34, 55-61.	2.2	31
165	Pre-Steady State Kinetic Studies of the Fidelity of Nucleotide Incorporation by Yeast DNA Polymerase Î´. Biochemistry, 2010, 49, 7344-7350.	2.5	31
166	The Architecture of Yeast DNA Polymerase Î¶. Cell Reports, 2013, 5, 79-86.	6.4	31
167	Distinct mechanisms of cis-syn thymine dimer bypass by Dpo4 and DNA polymerase Â. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 12359-12364.	7.1	30
168	Requirement of Nse1, a Subunit of the Smc5-Smc6 Complex, for Rad52-Dependent Postreplication Repair of UV-Damaged DNA in <i>Saccharomyces cerevisiae</i>. Molecular and Cellular Biology, 2007, 27, 8409-8418.	2.3	29
169	Structural Basis for Error-free Replication of Oxidatively Damaged DNA by Yeast DNA Polymerase Î·. Structure, 2010, 18, 1463-1470.	3.3	29
170	Requirement of Rad18 protein for replication through DNA lesions in mouse and human cells. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 7799-7804.	7.1	29
171	TheSchizosaccharomyces pombe rhp3+gene required for DNA repair and cell viability is functionally interchangeable with theRAD3gene ofSaccharomyces cerevisiae. Nucleic Acids Research, 1992, 20, 2327-2334.	14.5	28
172	EXAMINATION OF ALLELIC VARIATION AT THE HEXOKINASE LOCI OF DROSOPHILA PSEUDOOBSCURA AND D. PERSIMILIS BY DIFFERENT METHODS. Genetics, 1977, 87, 743-761.	2.9	27
173	Lethality in Yeast of Trichothiodystrophy (TTD) Mutations in the Human Xeroderma Pigmentosum Group D Gene. Journal of Biological Chemistry, 1995, 270, 17660-17663.	3.4	25
174	GENETIC DIVERGENCE IN CLOSELY RELATED SIBLING SPECIES DROSOPHILA PSEUDOOBSCURA, DROSOPHILA PERSIMILIS AND DROSOPHILA MIRANDA. Evolution; International Journal of Organic Evolution, 1977, 31, 14-23.	2.3	24
175	Synergistic Interaction between Yeast Nucleotide Excision Repair Factors NEF2 and NEF4 in the Binding of Ultraviolet-damaged DNA. Journal of Biological Chemistry, 1999, 274, 24257-24262.	3.4	24
176	Fidelity and Damage Bypass Ability of Schizosaccharomyces pombe Eso1 Protein, Comprised of DNA Polymerase Î· and Sister Chromatid Cohesion Protein Ctf7. Journal of Biological Chemistry, 2001, 276, 42857-42862.	3.4	24
177	Deoxynucleotide Triphosphate Binding Mode Conserved in Y Family DNA Polymerases. Molecular and Cellular Biology, 2003, 23, 3008-3012.	2.3	24
178	Role of Human DNA Polymerase Îº in Extension Opposite from a cisâ€“syn Thymine Dimer. Journal of Molecular Biology, 2011, 408, 252-261.	4.2	22
179	Genetic Control of Replication through N1-methyladenine in Human Cells. Journal of Biological Chemistry, 2015, 290, 29794-29800.	3.4	22
180	FURTHER STUDIES ON GENE POLYMORPHISM IN THE MAINBODY AND GEOGRAPHICALLY ISOLATED POPULATIONS OF DROSOPHILA PSEUDOOBSCURA. Genetics, 1977, 85, 713-719.	2.9	21

#	Article	IF	Citations
181	Expression of the RAD1 and RAD3 genes of Saccharomyces cerevisiae is not affected by DNA damage or during the cell division cycle. Molecular Genetics and Genomics, 1985, 199, 59-63.	2.4	20
182	Replication across Template T/U by Human DNA Polymerase-Î¹. Structure, 2009, 17, 974-980.	3.3	20
183	GENE DIFFERENCES BETWEEN THIRD-CHROMOSOME INVERSIONS OF <i>DROSOPHILA PSEUDOOBSCURA</i>. Genetics, 1976, 84, 787-790.	2.9	20
184	Pre-Steady-State Kinetic Studies of Protein-Template-Directed Nucleotide Incorporation by the Yeast Rev1 Protein. Biochemistry, 2007, 46, 13451-13459.	2.5	19
185	DIFFERENT EFFECTS OF RAD GENES OF SACCHAROMYCES CEREVISIAE ON INCISIONS OF INTERSTRAND CROSSLINKS AND MONOADDUCTS IN DNA INDUCED BY PSORALEN PLUS NEAR UV LIGHT TREATMENT. Photochemistry and Photobiology, 1984, 39, 349-352.	2.5	18
186	Structural basis of DNA synthesis opposite 8-oxoguanine by human PrimPol primase-polymerase. Nature Communications, 2021, 12, 4020.	12.8	18
187	ASSOCIATIONS OF ALLELES OF THE ESTERASE-1 LOCUS WITH GENE ARRANGEMENTS OF THE LEFT ARM OF THE SECOND CHROMOSOME IN DROSOPHILA ROBUSTA. Genetics, 1973, 75, 371-379.	2.9	18
188	Genetic Analysis of Error-Prone Repair Systems in Saccharomyces cerevisiae. , 1980, 15, 141-158.		17
189	VARIATION IN ACTIVITIES OF AMYLASE ALLOZYMES ASSOCIATED WITH CHROMOSOME INVERSIONS IN DROSOPHILA PSEUDOOBSCURA, D. PERSIMILIS AND D. MIRANDA. Genetics, 1980, 95, 187-209.	2.9	17
190	Requirement of Replication Checkpoint Protein Kinases Mec1/Rad53 for Postreplication Repair in Yeast. MBio, 2011, 2, e00079-11.	4.1	16
191	Identification of two functional <scp>PCNA</scp>â€binding domains in human <scp>DNA</scp> polymerase Îº. Genes To Cells, 2014, 19, 594-601.	1.2	16
192	GENE POLYMORPHISM IN NATURAL POPULATIONS OF DROSOPHILA PERSIMILIS. Genetics, 1977, 85, 513-520.	2.9	15
193	A COMPARATIVE STUDY OF THE ESTERASE-5 LOCUS IN DROSOPHILA PSEUDOOBSCURA, D. PERSIMILIS AND D. MIRANDA. Genetics, 1977, 85, 697-711.	2.9	15
194	ALLELIC VARIANTS AT THE XANTHINE DEHYDROGENASE LOCUS AFFECTING ENZYME ACTIVITY IN DROSOPHILA PSEUDOOBSCURA. Genetics, 1977, 87, 159-168.	2.9	14
195	AN EXPERIMENTAL INVESTIGATION OF THE UNIT CHARGE MODEL OF PROTEIN POLYMORPHISM AND ITS RELATION TO THE ESTERASE-5 LOCUS OF DROSOPHILA PSEUDOOBSCURA, DROSOPHILA PERSIMILIS, AND DROSOPHILA MIRANDA. Genetics, 1977, 87, 717-742.	2.9	14
196	Interactions of the RAD7 and RAD23 excision repair genes of Saccharomyces cerevisiae with DNA repair genes in different epistasis groups. Current Genetics, 1989, 16, 219-223.	1.7	13
197	LOW GENE VARIATION IN <i>DROSOPHILA BUSCKII</i>. Genetics, 1973, 75, 571-576.	2.9	13
198	DNA polymerase Î¸ accomplishes translesion synthesis opposite 1,N⁶-ethenodeoxyadenosine with a remarkably high fidelity in human cells. Genes and Development, 2019, 33, 282-287.	5.9	12

#	Article	IF	Citations
199	Genetic Divergence in Closely Related Sibling Species Drosophila pseudoobscura, Drosophila persimilis and Drosophila miranda. Evolution; International Journal of Organic Evolution, 1977, 31, 14.	2.3	11
200	Mechanism of error-free DNA synthesis across N1-methyl-deoxyadenosine by human DNA polymerase-Î¹. Scientific Reports, 2017, 7, 43904.	3.3	11
201	Structural basis for polymerase Î·â€"promoted resistance to the anticancer nucleoside analog cytarabine. Scientific Reports, 2018, 8, 12702.	3.3	11
202	A novel role of DNA polymerase Î» in translesion synthesis in conjunction with DNA polymerase Î¶. Life Science Alliance, 2021, 4, e202000900.	2.8	10
203	ASSOCIATION OF ALLELES OF THE MALIC DEHYDROGENASE LOCUS WITH A PERICENTRIC INVERSION IN DROSOPHILA ROBUSTA. Genetics, 1974, 77, 565-568.	2.9	10
204	Genetic Control of Translesion Synthesis on Leading and Lagging DNA Strands in Plasmids Derived from Epstein-Barr Virus in Human Cells. MBio, 2012, 3, e00271-12.	4.1	8
205	Replication pastO6-Methylguanine by Yeast and Human DNA Polymerase Î·. Molecular and Cellular Biology, 2000, 20, 8001-8007.	2.3	8
206	Response to Burgers etÂal.. Molecular Cell, 2016, 61, 494-495.	9.7	7
207	Genetic control of predominantly error-free replication through an acrolein-derived minor-groove DNA adduct. Journal of Biological Chemistry, 2018, 293, 2949-2958.	3.4	7
208	Translesion synthesis DNA polymerases Î·, Î¹, and Î½ promote mutagenic replication through the anticancer nucleoside cytarabine. Journal of Biological Chemistry, 2019, 294, 19048-19054.	3.4	7
209	Genetic evidence for reconfiguration of DNA polymerase Î¸ active site for error-free translesion synthesis in human cells. Journal of Biological Chemistry, 2020, 295, 5918-5927.	3.4	7
210	Evidence for the Involvement of Nucleotide Excision Repair in the Removal of Abasic Sites in Yeast. Molecular and Cellular Biology, 2000, 20, 3522-3528.	2.3	7
211	Cryo-EM structure of translesion DNA synthesis polymerase Î¶ with a base pair mismatch. Nature Communications, 2022, 13, 1050.	12.8	7
212	Implications of inhibition of Rev1 interaction with Y family DNA polymerases for cisplatin chemotherapy. Genes and Development, 2021, 35, 1256-1270.	5.9	6
213	Hyper-recombination and mutator effects of the mms9-1, mms13-1, and mms21-1 mutations in Saccharomyces cerevisiae. Current Genetics, 1981, 4, 223-232.	1.7	5
214	Structural insights into mutagenicity of anticancer nucleoside analog cytarabine during replication by DNA polymerase Î·. Scientific Reports, 2019, 9, 16400.	3.3	5
215	Hoogsteen base-pairing in DNA replication? (reply). Nature, 2005, 437, E7-E7.	27.8	4
216	Reply to Sabbioneda et al.: Role of ubiquitin-binding motif of human DNA polymerase Î· in translesion synthesis. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, .	7.1	4

#	Article	IF	Citations
217	DNA polymerase Î» promotes error-free replication through Watsonâ€“Crick impairing N1-methyl-deoxyadenosine adduct in conjunction with DNA polymerase Î¶. Journal of Biological Chemistry, 2021, 297, 100868.	3.4	4
218	VARIATION IN BIOCHEMICAL PROPERTIES OF ALLOZYMES OF XANTHINE DEHYDROGENASE IN DROSOPHILA PSEUDOOBSCURA. Genetics, 1980, 96, 927-938.	2.9	4
219	DISTINCTIONS AMONG ALLELIC VARIANTS ASSOCIATED WITH CHROMOSOME 3 INVERSIONS IN DROSOPHILA PSEUDOOBSCURA AND DROSOPHILA PERSIMILIS. Genetics, 1980, 96, 727-741.	2.9	3
220	DEVELOPMENTAL VARIATION IN AMYLASE ALLOZYME ACTIVITY ASSOCIATED WITH CHROMOSOME INVERSIONS IN DROSOPHILA PERSIMILIS. Genetics, 1980, 95, 1001-1011.	2.9	3
221	ACTIVITY VARIANTS OF ACID PHOSPHATASE-3 AMONG CHROMOSOME <i>3</i> INVERSIONS OF <i>DROSOPHILA PSEUDOOBSCURA</i>. Genetics, 1980, 96, 743-755.	2.9	2
222	GENE VARIATION IN DROSOPHILA POPULATIONS. Taxon, 1971, 20, 55-62.	0.7	1
223	CONSERVATION OF STRUCTURE AND FUNCTION OF DNA REPAIR GENES BETWEEN YEAST AND HUMAN. , 1992, , 239-244.		0
224	The architecture of yeast DNA polymerase zeta (927.2). FASEB Journal, 2014, 28, 927.2.	0.5	0