Chikahide Masutani

List of Publications by Year
in descending order

91 papers	9,067 citations	50276 46 h-index	46799 89 g-index
92 all docs	92 docs citations	92 times ranked	4900 citing authors

#	Article	IF	Citations
1	The XPV (xeroderma pigmentosum variant) gene encodes human DNA polymerase Î·. Nature, 1999, 399, 700-704.	27.8	1,248
2	Xeroderma Pigmentosum Group C Protein Complex Is the Initiator of Global Genome Nucleotide Excision Repair. Molecular Cell, 1998, 2, 223-232.	9.7	796
3	A multistep damage recognition mechanism for global genomic nucleotide excision repair. Genes and Development, 2001, 15, 507-521.	5.9	378
4	Low fidelity DNA synthesis by human DNA polymerase-Î·. Nature, 2000, 404, 1011-1013.	27.8	356
5	Structure and mechanism of human DNA polymerase Î·. Nature, 2010, 465, 1044-1048.	27.8	300
6	Centrosome Protein Centrin 2/Caltractin 1 Is Part of the Xeroderma Pigmentosum Group C Complex That Initiates Global Genome Nucleotide Excision Repair. Journal of Biological Chemistry, 2001, 276, 18665-18672.	3.4	290
7	Error-prone bypass of certain DNA lesions by the human DNA polymerase Îº. Genes and Development, 2000, 14, 1589-1594.	5.9	250
8	Interaction of hREV1 with three human Y-family DNA polymerases. Genes To Cells, 2004, 9, 523-531.	1.2	244
9	Interaction of hHR23 with S5a. Journal of Biological Chemistry, 1999, 274, 28019-28025.	3.4	243
10	Preferential cisâ€“syn thymine dimer bypass by DNA polymerase Î· occurs with biased fidelity. Nature, 2004, 428, 97-100.	27.8	241
11	The Xeroderma Pigmentosum Group C Protein Complex XPC-HR23B Plays an Important Role in the Recruitment of Transcription Factor IIH to Damaged DNA. Journal of Biological Chemistry, 2000, 275, 9870-9875.	3.4	240
12	Dual Roles for DNA Polymerase Î· in Homologous DNA Recombination and Translesion DNA Synthesis. Molecular Cell, 2005, 20, 793-799.	9.7	230
13	Centrin 2 Stimulates Nucleotide Excision Repair by Interacting with Xeroderma Pigmentosum Group C Protein. Molecular and Cellular Biology, 2005, 25, 5664-5674.	2.3	225
14	Efficient Translesion Replication Past Oxaliplatin and Cisplatin GpG Adducts by Human DNA Polymerase Î·â€. Biochemistry, 2000, 39, 4575-4580.	2.5	209
15	High-efficiency bypass of DNA damage by human DNA polymerase Q. EMBO Journal, 2004, 23, 4484-4494.	7.8	186
16	Error rate and specificity of human and murine DNA polymerase Î·. Journal of Molecular Biology, 2001, 312, 335-346.	4.2	171
17	129-derived Strains of Mice Are Deficient in DNA Polymerase Î¹ and Have Normal Immunoglobulin Hypermutation. Journal of Experimental Medicine, 2003, 198, 635-643.	8.5	169
18	Characterization of DNA Recognition by the Human UV-damaged DNA-binding Protein. Journal of Biological Chemistry, 1999, 274, 20027-20033.	3.4	165

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19	Molecular analysis of mutations in DNA polymerase Î· in xeroderma pigmentosum-variant patients. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 815-820.	7.1	165
20	DNA Repair Protein XPA Binds Replication Protein A (RPA). Journal of Biological Chemistry, 1995, 270, 4152-4157.	3.4	150
21	Translesion Synthesis by Human DNA Polymerase Î· across Thymine Glycol Lesionsâ€. Biochemistry, 2002, 41, 6090-6099.	2.5	132
22	Different mutation signatures in DNA polymerase Â- and MSH6-deficient mice suggest separate roles in antibody diversification. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 8656-8661.	7.1	115
23	Oxygen Free Radical Damage to DNA. Journal of Biological Chemistry, 2001, 276, 49283-49288.	3.4	111
24	3-Methyladenine-DNA Glycosylase (MPG Protein) Interacts with Human RAD23 Proteins. Journal of Biological Chemistry, 2000, 275, 28433-28438.	3.4	109
25	Diversity of the damage recognition step in the global genomic nucleotide excision repair in vitro. Mutation Research DNA Repair, 2001, 485, 219-227.	3.7	109
26	UV-B Radiation Induces Epithelial Tumors in Mice Lacking DNA Polymerase Î· and Mesenchymal Tumors in Mice Deficient for DNA Polymerase Î¹. Molecular and Cellular Biology, 2006, 26, 7696-7706.	2.3	102
27	Palm Mutants in DNA Polymerases Î± and Î· Alter DNA Replication Fidelity and Translesion Activity. Molecular and Cellular Biology, 2004, 24, 2734-2746.	2.3	83
28	The carboxy-terminal domain of the XPC protein plays a crucial role in nucleotide excision repair through interactions with transcription factor IIH. DNA Repair, 2002, 1, 449-461.	2.8	82
29	Translesion DNA Synthesis Catalyzed by Human Pol Î· and Pol Îº across 1,N 6-Ethenodeoxyadenosine. Journal of Biological Chemistry, 2001, 276, 18717-18721.	3.4	80
30	Preferential Misincorporation of Purine Nucleotides by Human DNA Polymerase Î· Opposite Benzo[a]pyrene 7,8-Diol 9,10-Epoxide Deoxyguanosine Adducts. Journal of Biological Chemistry, 2002, 277, 11765-11771.	3.4	80
31	Proofreading of DNA Polymerase Î·-dependent Replication Errors. Journal of Biological Chemistry, 2001, 276, 2317-2320.	3.4	73
32	DNA binding properties of human DNA polymerase Î·: implications for fidelity and polymerase switching of translesion synthesis. Genes To Cells, 2004, 9, 1139-1150.	1.2	70
33	Erroneous incorporation of oxidized DNA precursors by Yâ€family DNA polymerases. EMBO Reports, 2003, 4, 269-273.	4.5	69
34	DNA Polymerases Î· and Î¸ Function in the Same Genetic Pathway to Generate Mutations at A/T during Somatic Hypermutation of Ig Genes*. Journal of Biological Chemistry, 2007, 282, 17387-17394.	3.4	62
35	Genomic structure, chromosomal localization and identification of mutations in the xeroderma pigmentosum variant (XPV) gene. Oncogene, 2000, 19, 4721-4728.	5.9	58
36	The Molecular Chaperone Hsp90 Regulates Accumulation of DNA Polymerase Î· at Replication Stalling Sites in UV-Irradiated Cells. Molecular Cell, 2010, 37, 79-89.	9.7	58

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37	Miscoding Properties of 2â€²-Deoxyinosine, a Nitric Oxide-Derived DNA Adduct, during Translesion Synthesis Catalyzed by Human DNA Polymerases. Journal of Molecular Biology, 2008, 377, 1015-1023.	4.2	57
38	A human DNA polymerase Î· complex containing Rad18, Rad6 and Rev1; proteomic analysis and targeting of the complex to the chromatin-bound fraction of cells undergoing replication fork arrest. Genes To Cells, 2006, 11, 731-744.	1.2	55
39	NBS1 Recruits RAD18 via a RAD6-like Domain and Regulates Pol Î·-Dependent Translesion DNA Synthesis. Molecular Cell, 2011, 43, 788-797.	9.7	55
40	USP7 Is a Suppressor of PCNA Ubiquitination and Oxidative-Stress-Induced Mutagenesis in Human Cells. Cell Reports, 2015, 13, 2072-2080.	6.4	55
41	Simultaneous Disruption of Two DNA Polymerases, PolÎ· and PolÎ¶, in Avian DT40 Cells Unmasks the Role of PolÎ· in Cellular Response to Various DNA Lesions. PLoS Genetics, 2010, 6, e1001151.	3.5	54
42	In vitro Replication Study of Modified bases in ras Sequences.. Chemical and Pharmaceutical Bulletin, 1992, 40, 2792-2795.	1.3	53
43	Efficiency of Extension of Mismatched Primer Termini across from Cisplatin and Oxaliplatin Adducts by Human DNA Polymerases Î² and Î· in Vitroâ€. Biochemistry, 2003, 42, 14197-14206.	2.5	53
44	Interaction with DNA polymerase Î· is required for nuclear accumulation of REV1 and suppression of spontaneous mutations in human cells. DNA Repair, 2009, 8, 585-599.	2.8	53
45	En bloc transfer of polyubiquitin chains to PCNA in vitro is mediated by two different human E2â€"E3 pairs. Nucleic Acids Research, 2012, 40, 10394-10407.	14.5	53
46	Penicilliols A and B, novel inhibitors specific to mammalian Y-family DNA polymerases. Bioorganic and Medicinal Chemistry, 2009, 17, 1811-1816.	3.0	48
47	Different types of interaction between PCNA and PIP boxes contribute to distinct cellular functions of Y-family DNA polymerases. Nucleic Acids Research, 2015, 43, 7898-7910.	14.5	47
48	An abasic site analogue activates a c-Ha-rasgene by a point mutation at modified and adjacent positions. Nucleic Acids Research, 1992, 20, 4409-4415.	14.5	46
49	Frameshifts and deletions during in vitro translesion synthesis past Ptâ€"DNA adducts by DNA polymerases Î² and Î·. DNA Repair, 2002, 1, 1003-1016.	2.8	43
50	Regulation of DNA damage tolerance in mammalian cells by post-translational modifications of PCNA. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2017, 803-805, 82-88.	1.0	43
51	Mutagenic and Nonmutagenic Bypass of DNA Lesions byDrosophila DNA Polymerases dpolÎ· and dpolÎ¹. Journal of Biological Chemistry, 2001, 276, 15155-15163.	3.4	35
52	Efficient and Erroneous Incorporation of Oxidized DNA Precursors by Human DNA Polymerase Î·. Biochemistry, 2007, 46, 5515-5522.	2.5	34
53	Molecular Chaperone Hsp90 Regulates REV1-Mediated Mutagenesis. Molecular and Cellular Biology, 2011, 31, 3396-3409.	2.3	33
54	Characterization of a Y-Family DNA Polymerase eta from the Eukaryotic ThermophileAlvinella pompejana. Journal of Nucleic Acids, 2010, 2010, 1-13.	1.2	32

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55	Comparison of Incorporation and Extension of Nucleotides in vitro opposite 8-Hydroxyguanine (7,8-Dihydro-8-oxoguanine) in Hot Spots of the c-Ha-ras Gene. Japanese Journal of Cancer Research, 1995, 86, 270-276.	1.7	31
56	Reconstitution of damage DNA excision reaction from SV40 minichromosomes with purified nucleotide excision repair proteins. Mutation Research DNA Repair, 2000, 459, 147-160.	3.7	31
57	Chemical synthesis and translesion replication of a cis-syn cyclobutane thymine-uracil dimer. Nucleic Acids Research, 2004, 32, 1738-1745.	14.5	30
58	Guanine- 5-carboxylcytosine base pairs mimic mismatches during DNA replication. Scientific Reports, 2014, 4, 5220.	3.3	27
59	A Second Proliferating Cell Nuclear Antigen Loader Complex, Ctf18-Replication Factor C, Stimulates DNA Polymerase Î· Activity*. Journal of Biological Chemistry, 2007, 282, 20906-20914.	3.4	26
60	Critical amino acids in human DNA polymerases Î· and Îº involved in erroneous incorporation of oxidized nucleotides. Nucleic Acids Research, 2010, 38, 859-867.	14.5	26
61	Translesion Synthesis Past Estrogen-Derived DNA Adducts by Human DNA Polymerases Î· and Îºâ€. Biochemistry, 2004, 43, 6304-6311.	2.5	25
62	Deficiency of the Caenorhabditis elegans DNA Polymerase .ETA. Homologue Increases Sensitivity to UV Radiation during Germ-line Development. Cell Structure and Function, 2006, 31, 29-37.	1.1	24
63	Spatiotemporal regulation of PCNA ubiquitination in damage tolerance pathways. Critical Reviews in Biochemistry and Molecular Biology, 2019, 54, 418-442.	5.2	23
64	Cyclobutane thymine dimers in arasproto-oncogene hot spot activate the gene by point mutation. Nucleic Acids Research, 1993, 21, 2355-2361.	14.5	22
65	Modulation of TFIIH-associated kinase activity by complex formation and its relationship with CTD phosphorylation of RNA polymerase II. Genes To Cells, 2000, 5, 407-423.	1.2	22
66	Polymerization by DNA polymerase Â is blocked by cis-diamminedichloroplatinum(II) 1,3-d(GpTpG) cross-link: implications for cytotoxic effects in nucleotide excision repair-negative tumor cells. Carcinogenesis, 2010, 31, 388-393.	2.8	20
67	UV-induced mutations in epidermal cells of mice defective in DNA polymerase Î· and/or Î¹. DNA Repair, 2015, 29, 139-146.	2.8	19
68	8-Hydroxyguanine in a mutational hotspot of the c-Ha-ras gene causes misreplication, 'action-at-a-distance' mutagenesis and inhibition of replication. Nucleic Acids Research, 2003, 31, 6085-6095.	14.5	18
69	Error-prone Translesion Synthesis by Human DNA Polymerase Î· on DNA-containing Deoxyadenosine Adducts of 7,8-Dihydroxy-9,10-epoxy-7,8,9,10-tetrahydrobenzo[a]pyrene. Journal of Biological Chemistry, 2005, 280, 39684-39692.	3.4	17
70	Specificity of mutations induced by incorporation of oxidized dNTPs into DNA by human DNA polymerase Î·. DNA Repair, 2008, 7, 497-506.	2.8	16
71	Regulation of HLTF-mediated PCNA polyubiquitination by RFC and PCNA monoubiquitination levels determines choice of damage tolerance pathway. Nucleic Acids Research, 2018, 46, 11340-11356.	14.5	16
72	Stimulation of DNA Synthesis by Mouse DNA Helicase B in a DNA Replication System Containing Eukaryotic Replication Origins. Biochemistry, 1995, 34, 7913-7922.	2.5	15

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73	Identification and Characterization of an Intermediate in the Alkali Degradation of (6-4) Photoproduct-containing DNA. Journal of Biological Chemistry, 2003, 278, 51968-51973.	3.4	15
74	The BAH domain of BAF180 is required for PCNA ubiquitination. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2015, 779, 16-23.	1.0	15
75	Stepwise multipolyubiquitination of p53 by the E6AP-E6 ubiquitin ligase complex. Journal of Biological Chemistry, 2019, 294, 14860-14875.	3.4	15
76	Relevance of Simultaneous Mono-Ubiquitinations of Multiple Units of PCNA Homo-Trimers in DNA Damage Tolerance. PLoS ONE, 2015, 10, e0118775.	2.5	14
77	Preferential digestion of PCNA-ubiquitin and p53-ubiquitin linkages by USP7 to remove polyubiquitin chains from substrates. Journal of Biological Chemistry, 2019, 294, 4177-4187.	3.4	12
78	Translesional DNA Synthesis through a C8-Guanyl Adduct of 2-Amino-1-methyl-6-phenylimidazo[4,5-b]pyridine (PhIP) in Vitro. Journal of Biological Chemistry, 2009, 284, 25585-25592.	3.4	11
79	A novel interaction between human DNA polymerase Î· and MutLÎ±. Biochemical and Biophysical Research Communications, 2009, 389, 40-45.	2.1	10
80	A cyclobutane thymineâ€“N4-methylcytosine dimer is resistant to hydrolysis but strongly blocks DNA synthesis. Nucleic Acids Research, 2014, 42, 2075-2084.	14.5	10
81	Use of RNAi in C. elegans. Methods in Molecular Biology, 2008, 442, 129-137.	0.9	9
82	Sphingosine, a Modulator of Human Translesion DNA Polymerase Activity. Journal of Biological Chemistry, 2014, 289, 21663-21672.	3.4	9
83	Xeroderma Pigmentosum Variant, XP-V: Its Product and Biological Roles. Advances in Experimental Medicine and Biology, 2008, 637, 93-102.	1.6	9
84	2-Hydroxy-2â€˜-deoxyadenosine 5â€˜-Triphosphate Enhances AÂ·T â†’ CÂ·G Mutations Caused by 8-Hydroxy-2â€˜-deoxyguanosine 5â€˜-Triphosphate by Suppressing Its Degradation upon Replication in a HeLa Extract. Biochemistry, 2007, 46, 6639-6646.	2.5	8
85	Photosensitized [2 + 2] cycloaddition of N -acetylated cytosine affords stereoselective formation of cyclobutane pyrimidine dimer. Nucleic Acids Research, 2011, 39, 1165-1175.	14.5	8
86	A new Drosophila ultraviolet light-damaged DNA recognition endonuclease that selectively nicks a (6-4) photoproduct site. Biochimica Et Biophysica Acta Gene Regulatory Mechanisms, 1998, 1397, 180-188.	2.4	5
87	Acetaldehyde induces NER repairable mutagenic DNA lesions. Carcinogenesis, 2022, 43, 52-59.	2.8	4
88	Detection of reduced RNA synthesis in UV-irradiated Cockayne syndrome group B cells using an isolated nuclear system. Biochimica Et Biophysica Acta - Molecular Cell Research, 2002, 1592, 129-134.	4.1	3
89	Translesion DNA Synthesis and Damage Tolerance Pathways. , 2016, , 249-304.		3
90	Translesion DNA Synthesis. , 2019, , 169-189.		0

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91	Human DNA Polymerase η and Its Regulatory Mechanisms. Genes and Environment, 2012, 34, 63-69.	2.1	0