

Lawrence A Loeb

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

207
papers

14,567
citations

62
h-index

115
g-index

223
ext. papers

16,071
ext. citations

11.1
avg, IF

6.69
L-index

#	Paper	IF	Citations
207	Accurate detection of subclonal variants in paired diagnosis-relapse acute myeloid leukemia samples by next generation Duplex Sequencing.. <i>Leukemia Research</i> , 2022 , 115, 106822	2.7	
206	Co-Occurring Mutation Clusters Predict Drug Sensitivity in Acute Myeloid Leukemia. <i>Blood</i> , 2020 , 136, 12-13	2.2	0
205	Rare Mutations in Cancer Drug Resistance and Implications for Therapy. <i>Clinical Pharmacology and Therapeutics</i> , 2020 , 108, 437-439	6.1	4
204	Ultra-Sensitive TP53 Sequencing for Cancer Detection Reveals Progressive Clonal Selection in Normal Tissue over a Century of Human Lifespan. <i>Cell Reports</i> , 2019 , 28, 132-144.e3	10.6	45
203	A high-resolution landscape of mutations in the super-enhancer in normal human B cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 24779-24785	11.5	9
202	Extensive subclonal mutational diversity in human colorectal cancer and its significance. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 ,	11.5	23
201	Enhancing the accuracy of next-generation sequencing for detecting rare and subclonal mutations. <i>Nature Reviews Genetics</i> , 2018 , 19, 269-285	30.1	235
200	Single-Molecule Sequencing Reveals Patterns of Preexisting Drug Resistance That Suggest Treatment Strategies in Philadelphia-Positive Leukemias. <i>Clinical Cancer Research</i> , 2018 , 24, 5321-5334	12.9	15
199	High Throughput Drug Screening of Leukemia Stem Cells Reveals Resistance to Standard Therapies and Sensitivity to Other Agents in Acute Myeloid Leukemia. <i>Blood</i> , 2018 , 132, 180-180	2.2	1
198	Evolutionary dynamics and significance of multiple subclonal mutations in cancer. <i>DNA Repair</i> , 2017 , 56, 7-15	4.3	12
197	Richmond T. Prehn: In Memoriam (1922-2016). <i>Cancer Research</i> , 2017 , 77, 593-594	10.1	
196	Mutational spectra of aflatoxin B in vivo establish biomarkers of exposure for human hepatocellular carcinoma. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, E3101-E3109	11.5	58
195	Homozygosity for the WRN Helicase-Inactivating Variant, R834C, does not confer a Werner syndrome clinical phenotype. <i>Scientific Reports</i> , 2017 , 7, 44081	4.9	4
194	Accurate RNA consensus sequencing for high-fidelity detection of transcriptional mutagenesis-induced epimutations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 9415-9420	11.5	18
193	The influence of subclonal resistance mutations on targeted cancer therapy. <i>Nature Reviews Clinical Oncology</i> , 2016 , 13, 335-47	19.4	139
192	Why Cockayne syndrome patients do not get cancer despite their DNA repair deficiency. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 10151-6	11.5	34
191	Exploring the implications of distinct mutational signatures and mutation rates in aging and cancer. <i>Genome Medicine</i> , 2016 , 8, 30	14.4	11

190	Tobacco Causes Human Cancers--A Concept Founded on Epidemiology and an Insightful Experiment Now Requires Translation Worldwide. <i>Cancer Research</i> , 2016 , 76, 765-6	10.1	2
189	Analysis of the Sub-Clonal Origins of Compound Mutations in Patients with Refractory Ph+ Malignancies Treated with Ponatinib. <i>Blood</i> , 2016 , 128, 1061-1061	2.2	1
188	Decreased Mitochondrial Mutagenesis during Transformation of Human Breast Stem Cells into Tumorigenic Cells. <i>Cancer Research</i> , 2016 , 76, 4569-78	10.1	12
187	Human Cancers Express a Mutator Phenotype: Hypothesis, Origin, and Consequences. <i>Cancer Research</i> , 2016 , 76, 2057-9	10.1	61
186	Ultra-deep sequencing detects ovarian cancer cells in peritoneal fluid and reveals somatic TP53 mutations in noncancerous tissues. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 6005-10	11.5	104
185	Sequencing small genomic targets with high efficiency and extreme accuracy. <i>Nature Methods</i> , 2015 , 12, 423-5	21.6	95
184	Emergence of Sub-Clonal Drug Resistance Mutations during CML Therapy. <i>Blood</i> , 2015 , 126, 478-478	2.2	1
183	Detection of Ultra-Rare Mitochondrial Mutations in Breast Stem Cells by Duplex Sequencing. <i>PLoS ONE</i> , 2015 , 10, e0136216	3.7	19
182	Detecting ultralow-frequency mutations by Duplex Sequencing. <i>Nature Protocols</i> , 2014 , 9, 2586-606	18.8	247
181	Cancer: One cell at a time. <i>Nature</i> , 2014 , 512, 143-4	50.4	22
180	Sphingosine, a modulator of human translesion DNA polymerase activity. <i>Journal of Biological Chemistry</i> , 2014 , 289, 21663-72	5.4	8
179	A rapid assay for measuring nucleotide excision repair by oligonucleotide retrieval. <i>Scientific Reports</i> , 2014 , 4, 4894	4.9	21
178	Targeted Ultra-Deep High Accuracy Sequencing of Pre-Treatment AML Reveals a Diversity of Mutational Phenotypes and Evidence of Preexisting Relapse-Associated Subclones. <i>Blood</i> , 2014 , 124, 2372-2372	2.2	
177	Altered RECQ Helicase Expression in Sporadic Primary Colorectal Cancers. <i>Translational Oncology</i> , 2013 , 6, 458-69	4.9	33
176	An in-frame deletion at the polymerase active site of POLD1 causes a multisystem disorder with lipodystrophy. <i>Nature Genetics</i> , 2013 , 45, 947-50	36.3	120
175	Do mutator mutations fuel tumorigenesis?. <i>Cancer and Metastasis Reviews</i> , 2013 , 32, 353-61	9.6	44
174	Ultra-sensitive sequencing reveals an age-related increase in somatic mitochondrial mutations that are inconsistent with oxidative damage. <i>PLoS Genetics</i> , 2013 , 9, e1003794	6	223
173	Clonal expansions and short telomeres are associated with neoplasia in early-onset, but not late-onset, ulcerative colitis. <i>Inflammatory Bowel Diseases</i> , 2013 , 19, 2593-602	4.5	20

172	A substitution in the fingers domain of DNA polymerase β reduces fidelity by altering nucleotide discrimination in the catalytic site. <i>Journal of Biological Chemistry</i> , 2013 , 288, 5572-80	5.4	11
171	Implications of genetic heterogeneity in cancer. <i>Annals of the New York Academy of Sciences</i> , 2012 , 1267, 110-6	6.5	48
170	DNA polymerase delta in DNA replication and genome maintenance. <i>Environmental and Molecular Mutagenesis</i> , 2012 , 53, 666-82	3.2	78
169	Detection of ultra-rare mutations by next-generation sequencing. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 14508-13	11.5	627
168	Somatic mutations in aging, cancer and neurodegeneration. <i>Mechanisms of Ageing and Development</i> , 2012 , 133, 118-26	5.6	135
167	The Werner syndrome exonuclease facilitates DNA degradation and high fidelity DNA polymerization by human DNA polymerase β . <i>Journal of Biological Chemistry</i> , 2012 , 287, 12480-90	5.4	35
166	The Werner syndrome protein is distinguished from the Bloom syndrome protein by its capacity to tightly bind diverse DNA structures. <i>PLoS ONE</i> , 2012 , 7, e30189	3.7	35
165	The biochemistry and fidelity of synthesis by the apicoplast genome replication DNA polymerase Pfpref from the malaria parasite <i>Plasmodium falciparum</i> . <i>Journal of Molecular Biology</i> , 2011 , 410, 27-38	6.5	11
164	Mutation of HIV-1 genomes in a clinical population treated with the mutagenic nucleoside KP1461. <i>PLoS ONE</i> , 2011 , 6, e15135	3.7	70
163	Human cancers express mutator phenotypes: origin, consequences and targeting. <i>Nature Reviews Cancer</i> , 2011 , 11, 450-7	31.3	291
162	Roles of DNA polymerase I in leading and lagging-strand replication defined by a high-resolution mutation footprint of ColE1 plasmid replication. <i>Nucleic Acids Research</i> , 2011 , 39, 7020-33	20.1	20
161	A random mutation capture assay to detect genomic point mutations in mouse tissue. <i>Nucleic Acids Research</i> , 2011 , 39, e73	20.1	12
160	A mitochondrial view of aging, reactive oxygen species and metastatic cancer. <i>Aging Cell</i> , 2010 , 9, 462-5	9.9	29
159	Active site mutations in mammalian DNA polymerase delta alter accuracy and replication fork progression. <i>Journal of Biological Chemistry</i> , 2010 , 285, 32264-72	5.4	17
158	Optimization of DNA polymerase mutation rates during bacterial evolution. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 1154-9	11.5	64
157	Mutational heterogeneity in human cancers: origin and consequences. <i>Annual Review of Pathology: Mechanisms of Disease</i> , 2010 , 5, 51-75	34	172
156	Frameshift mutagenesis and microsatellite instability induced by human alkyladenine DNA glycosylase. <i>Molecular Cell</i> , 2010 , 37, 843-53	17.6	39
155	Mitochondrial mutagenesis induced by tumor-specific radiation bystander effects. <i>Journal of Molecular Medicine</i> , 2010 , 88, 701-8	5.5	12

154	Lethal mutagenesis: targeting the mutator phenotype in cancer. <i>Seminars in Cancer Biology</i> , 2010 , 20, 353-9	12.7	61
153	Reply: Is There Any Genetic Instability in Human Cancer?. <i>DNA Repair</i> , 2010 , 9, 859-860	4.3	9
152	The mutator phenotype in cancer: molecular mechanisms and targeting strategies. <i>Current Drug Targets</i> , 2010 , 11, 1296-303	3	32
151	Molecularly evolved thymidylate synthase inhibits 5-fluorodeoxyuridine toxicity in human hematopoietic cells. <i>Human Gene Therapy</i> , 2009 , 20, 1703-7	4.8	4
150	Cancer genome sequencing--an interim analysis. <i>Cancer Research</i> , 2009 , 69, 4948-50	10.1	60
149	Clonal expansions in ulcerative colitis identify patients with neoplasia. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 20871-6	11.5	53
148	Overexpression of catalase targeted to mitochondria attenuates murine cardiac aging. <i>Circulation</i> , 2009 , 119, 2789-97	16.7	347
147	High fidelity and lesion bypass capability of human DNA polymerase delta. <i>Biochimie</i> , 2009 , 91, 1163-72	4.6	76
146	On mitochondria, mutations, and methodology. <i>Cell Metabolism</i> , 2009 , 10, 437	24.6	16
145	DNA deletions and clonal mutations drive premature aging in mitochondrial mutator mice. <i>Nature Genetics</i> , 2008 , 40, 392-4	36.3	314
144	DNA polymerases and human disease. <i>Nature Reviews Genetics</i> , 2008 , 9, 594-604	30.1	219
143	Substrate binding pocket residues of human alkyladenine-DNA glycosylase critical for methylating agent survival. <i>DNA Repair</i> , 2008 , 7, 1731-45	4.3	5
142	Cancers exhibit a mutator phenotype: clinical implications. <i>Cancer Research</i> , 2008 , 68, 3551-7; discussion 3557	10.1	175
141	Advances in chemical carcinogenesis: a historical review and prospective. <i>Cancer Research</i> , 2008 , 68, 6863-72	3.7	215
140	The Werner syndrome protein binds replication fork and holliday junction DNAs as an oligomer. <i>Journal of Biological Chemistry</i> , 2008 , 283, 24478-83	5.4	57
139	Mitochondrial point mutations do not limit the natural lifespan of mice. <i>Nature Genetics</i> , 2007 , 39, 540-3	36.3	310
138	LOH-proficient embryonic stem cells: a model of cancer progenitor cells?. <i>Trends in Genetics</i> , 2007 , 23, 154-7	8.5	9
137	Highly tolerated amino acid substitutions increase the fidelity of Escherichia coli DNA polymerase I. <i>Journal of Biological Chemistry</i> , 2007 , 282, 12201-9	5.4	39

136	Werner syndrome protein interacts functionally with translesion DNA polymerases. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007 , 104, 10394-9	11.5	48
135	Mutation at the polymerase active site of mouse DNA polymerase delta increases genomic instability and accelerates tumorigenesis. <i>Molecular and Cellular Biology</i> , 2007 , 27, 7669-82	4.8	84
134	Genetic constraints on protein evolution. <i>Critical Reviews in Biochemistry and Molecular Biology</i> , 2007 , 42, 313-26	8.7	93
133	Mutations in DNA polymerase eta are not detected in squamous cell carcinoma of the skin. <i>International Journal of Cancer</i> , 2006 , 119, 2225-7	7.5	8
132	Efficiency of carcinogenesis with and without a mutator mutation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006 , 103, 14140-5	11.5	75
131	Human cancers express a mutator phenotype. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006 , 103, 18238-42	11.5	292
130	Differential competitive resistance to methylating versus chloroethylating agents among five O6-alkylguanine DNA alkyltransferases in human hematopoietic cells. <i>Molecular Cancer Therapeutics</i> , 2006 , 5, 121-8	6.1	9
129	Mutator phenotypes caused by substitution at a conserved motif A residue in eukaryotic DNA polymerase delta. <i>Journal of Biological Chemistry</i> , 2006 , 281, 4486-94	5.4	61
128	DNA Repair Enzymes 2006 , 179-196		
127	Mitochondrial DNA integrity is not dependent on DNA polymerase-beta activity. <i>DNA Repair</i> , 2006 , 5, 71-9	4.3	19
126	Generation of mutator mutants during carcinogenesis. <i>DNA Repair</i> , 2006 , 5, 294-302	4.3	41
125	Mutability of DNA polymerase I: implications for the creation of mutant DNA polymerases. <i>DNA Repair</i> , 2005 , 4, 1390-8	4.3	36
124	Lethal mutagenesis of HIV. <i>Virus Research</i> , 2005 , 107, 215-28	6.4	50
123	The mitochondrial theory of aging and its relationship to reactive oxygen species damage and somatic mtDNA mutations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005 , 102, 18769-70	11.5	173
122	Quantification of random genomic mutations. <i>Nature Methods</i> , 2005 , 2, 285-90	21.6	79
121	Genetic instability in cancer: theory and experiment. <i>Seminars in Cancer Biology</i> , 2005 , 15, 423-35	12.7	100
120	Incorporation of reporter-labeled nucleotides by DNA polymerases. <i>BioTechniques</i> , 2005 , 38, 257-64	2.5	48
119	Negative clonal selection in tumor evolution. <i>Genetics</i> , 2005 , 171, 2123-31	4	36

118	Auto-acetylation of transcription factors as a control mechanism in gene expression. <i>Cell Cycle</i> , 2004 , 3, 114-5	4.7	29
117	Protein tolerance to random amino acid change. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004 , 101, 9205-10	11.5	218
116	Mutations in the R2 subunit of ribonucleotide reductase that confer resistance to hydroxyurea. <i>Journal of Biological Chemistry</i> , 2004 , 279, 40723-8	5.4	25
115	The enzymatic activities of the Werner syndrome protein are disabled by the amino acid polymorphism R834C. <i>Journal of Biological Chemistry</i> , 2004 , 279, 55499-505	5.4	40
114	Destabilization of tetraplex structures of the fragile X repeat sequence (CGG) _n is mediated by homolog-conserved domains in three members of the hnRNP family. <i>Nucleic Acids Research</i> , 2004 , 32, 4145-54	20.1	53
113	Environmental and chemical carcinogenesis. <i>Seminars in Cancer Biology</i> , 2004 , 14, 473-86	12.7	421
112	Viral error catastrophe by mutagenic nucleosides. <i>Annual Review of Microbiology</i> , 2004 , 58, 183-205	17.5	178
111	The Werner syndrome protein confers resistance to the DNA lesions N3-methyladenine and O6-methylguanine: implications for WRN function. <i>DNA Repair</i> , 2004 , 3, 629-38	4.3	40
110	Mutations in the alpha8 loop of human APE1 alter binding and cleavage of DNA containing an abasic site. <i>Journal of Biological Chemistry</i> , 2003 , 278, 46994-7001	5.4	10
109	Insertion of the T3 DNA polymerase thioredoxin binding domain enhances the processivity and fidelity of Taq DNA polymerase. <i>Nucleic Acids Research</i> , 2003 , 31, 4702-9	20.1	39
108	The N-terminal domain of the large subunit of human replication protein A binds to Werner syndrome protein and stimulates helicase activity. <i>Mechanisms of Ageing and Development</i> , 2003 , 124, 921-30	5.6	49
107	Multiple mutations and cancer. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003 , 100, 776-81	11.5	557
106	Targeted gene evolution in Escherichia coli using a highly error-prone DNA polymerase I. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003 , 100, 9727-32	11.5	116
105	Amino acid substitutions at conserved tyrosine 52 alter fidelity and bypass efficiency of human DNA polymerase eta. <i>Journal of Biological Chemistry</i> , 2003 , 278, 19341-6	5.4	14
104	Tumbling down a different pathway to genetic instability. <i>Journal of Clinical Investigation</i> , 2003 , 112, 1793-5	15.9	9
103	Targeted mutagenesis in E. coli: A powerful tool for the generation of random mutant libraries. <i>Discovery Medicine</i> , 2003 , 3, 36-7	2.5	1
102	In vitro production and screening of DNA polymerase eta mutants for catalytic diversity. <i>BioTechniques</i> , 2002 , 33, 1136-42, 1144	2.5	11
101	The processing of Holliday junctions by BLM and WRN helicases is regulated by p53. <i>Journal of Biological Chemistry</i> , 2002 , 277, 31980-7	5.4	91

100	Distribution of mutations in human thymidylate synthase yielding resistance to 5-fluorodeoxyuridine. <i>Journal of Biological Chemistry</i> , 2002 , 277, 36304-11	5.4	37
99	Deregulated DNA polymerase beta induces chromosome instability and tumorigenesis. <i>Cancer Research</i> , 2002 , 62, 3511-4	10.1	85
98	Unwinding the molecular basis of the Werner syndrome. <i>Mechanisms of Ageing and Development</i> , 2001 , 122, 921-44	5.6	85
97	A single highly mutable catalytic site amino acid is critical for DNA polymerase fidelity. <i>Journal of Biological Chemistry</i> , 2001 , 276, 5044-51	5.4	88
96	The conserved active site motif A of Escherichia coli DNA polymerase I is highly mutable. <i>Journal of Biological Chemistry</i> , 2001 , 276, 18836-42	5.4	40
95	In vivo mutagenesis by Escherichia coli DNA polymerase I. Ile(709) in motif A functions in base selection. <i>Journal of Biological Chemistry</i> , 2001 , 276, 46759-64	5.4	30
94	Interactions between the Werner syndrome helicase and DNA polymerase delta specifically facilitate copying of tetraplex and hairpin structures of the d(CGG) _n trinucleotide repeat sequence. <i>Journal of Biological Chemistry</i> , 2001 , 276, 16439-46	5.4	153
93	Prokaryotic DNA polymerase I: evolution, structure, and "base flipping" mechanism for nucleotide selection. <i>Journal of Molecular Biology</i> , 2001 , 308, 823-37	6.5	159
92	The Werner syndrome gene: the molecular basis of RecQ helicase-deficiency diseases. <i>Trends in Genetics</i> , 2000 , 16, 213-20	8.5	153
91	Enhanced in vivo repair of O ⁶ -methylthymine by a mutant human DNA alkyltransferase. <i>Carcinogenesis</i> , 2000 , 21, 1397-1402	4.6	
90	Thermus aquaticus DNA polymerase I mutants with altered fidelity. Interacting mutations in the O-helix. <i>Journal of Biological Chemistry</i> , 2000 , 275, 32728-35	5.4	57
89	Lethal mutagenesis of HIV by mutagenic ribonucleoside analogs. <i>AIDS Research and Human Retroviruses</i> , 2000 , 16, 1-3	1.6	69
88	Human Ku antigen tightly binds and stabilizes a tetrahelical form of the Fragile X syndrome d(CGG) _n expanded sequence. <i>Journal of Biological Chemistry</i> , 2000 , 275, 33134-41	5.4	21
87	Enhanced in vivo repair of O ⁶ -methylthymine by a mutant human DNA alkyltransferase. <i>Carcinogenesis</i> , 2000 , 21, 1397-1402	4.6	8
86	Multiple amino acid substitutions allow DNA polymerases to synthesize RNA. <i>Journal of Biological Chemistry</i> , 2000 , 275, 40266-72	5.4	80
85	Significance of multiple mutations in cancer. <i>Carcinogenesis</i> , 2000 , 21, 379-85	4.6	314
84	Human werner syndrome DNA helicase unwinds tetrahelical structures of the fragile X syndrome repeat sequence d(CGG) _n . <i>Journal of Biological Chemistry</i> , 1999 , 274, 12797-802	5.4	285
83	Human O ⁶ -alkylguanine-DNA alkyltransferase: protection against alkylating agents and sensitization to dibromoalkanes. <i>Carcinogenesis</i> , 1999 , 20, 2089-94	4.6	17

82	Improving enzymes for cancer gene therapy. <i>Nature Biotechnology</i> , 1999 , 17, 143-7	44.5	61
81	Redesigning the substrate specificity of human O(6)-alkylguanine-DNA alkyltransferase. Mutants with enhanced repair of O(4)-methylthymine. <i>Biochemistry</i> , 1999 , 38, 12097-103	3.2	19
80	Genetic instability and the mutator phenotype. Studies in ulcerative colitis. <i>American Journal of Pathology</i> , 1999 , 154, 1621-6	5.8	56
79	One small StEP in molecular evolution. <i>Nature Biotechnology</i> , 1998 , 16, 234-5	44.5	1
78	Origin of multiple mutations in human cancers. <i>Drug Metabolism Reviews</i> , 1998 , 30, 285-304	7	7
77	Fidelity of mutant HIV-1 reverse transcriptases: interaction with the single-stranded template influences the accuracy of DNA synthesis. <i>Biochemistry</i> , 1998 , 37, 5831-9	3.2	44
76	Characterization of Werner syndrome protein DNA helicase activity: directionality, substrate dependence and stimulation by replication protein A. <i>Nucleic Acids Research</i> , 1998 , 26, 2879-85	20.1	190
75	Random sequence mutagenesis and resistance to 5-fluorouridine in human thymidylate synthases. <i>Journal of Biological Chemistry</i> , 1998 , 273, 25809-17	5.4	31
74	Werner syndrome protein. I. DNA helicase and dna exonuclease reside on the same polypeptide. <i>Journal of Biological Chemistry</i> , 1998 , 273, 34139-44	5.4	198
73	Werner syndrome protein. II. Characterization of the integral 3Q-> 5Q DNA exonuclease. <i>Journal of Biological Chemistry</i> , 1998 , 273, 34145-50	5.4	176
72	The mutation rate and cancer. <i>Genetics</i> , 1998 , 148, 1483-90	4	164
71	Incorporation of the guanosine triphosphate analogs 8-oxo-dGTP and 8-NH ₂ -dGTP by reverse transcriptases and mammalian DNA polymerases. <i>Journal of Biological Chemistry</i> , 1997 , 272, 5892-8	5.4	70
70	Low fidelity mutants in the O-helix of <i>Thermus aquaticus</i> DNA polymerase I. <i>Journal of Biological Chemistry</i> , 1997 , 272, 11228-35	5.4	60
69	The Werner syndrome protein is a DNA helicase. <i>Nature Genetics</i> , 1997 , 17, 100-3	36.3	535
68	Inefficient repair of RNA x DNA hybrids. <i>FEBS Journal</i> , 1997 , 250, 492-501		17
67	Creating novel enzymes by applied molecular evolution. <i>Chemistry and Biology</i> , 1997 , 4, 889-98		33
66	Unnatural nucleotide sequences in biopharmaceutics. <i>Advances in Pharmacology</i> , 1996 , 35, 321-47	5.7	5
65	OXIDANTS AND MULTIPLE MUTATIONS IN CANCER. <i>Biochemical Society Transactions</i> , 1996 , 24, 522S-523S		51

64	Tolerance of different proteins for amino acid diversity. <i>Molecular Diversity</i> , 1996 , 2, 111-8	3.1	24
63	Human immunodeficiency virus reverse transcriptase. Functional mutants obtained by random mutagenesis coupled with genetic selection in <i>Escherichia coli</i> . <i>Journal of Biological Chemistry</i> , 1996 , 271, 4872-8	5.4	43
62	Mutagenicity and pausing of HIV reverse transcriptase during HIV plus-strand DNA synthesis. <i>Nucleic Acids Research</i> , 1994 , 22, 47-52	20.1	42
61	Herpes thymidine kinase mutants with altered catalytic efficiencies obtained by random sequence selection. <i>Protein Engineering, Design and Selection</i> , 1994 , 7, 83-9	1.9	19
60	Evidence against DNA polymerase beta as a candidate gene for Werner syndrome. <i>Human Genetics</i> , 1994 , 93, 507-12	6.3	5
59	Oxygen radical induced mutagenesis is DNA polymerase specific. <i>Journal of Molecular Biology</i> , 1994 , 235, 33-41	6.5	61
58	Selection of new biologically active molecules from random nucleotide sequences. <i>Gene</i> , 1993 , 137, 41-73.8		12
57	Multi-stage proofreading in DNA replication. <i>Quarterly Reviews of Biophysics</i> , 1993 , 26, 225-331	7	46
56	DNA damage and repair in brain: relationship to aging. <i>Mutation Research - DNAGing</i> , 1992 , 275, 317-29		38
55	The association of thymidine kinase activity and thymidine transport in <i>Escherichia coli</i> . <i>Gene</i> , 1991 , 99, 25-9	3.8	12
54	Errors in DNA synthesis: a source of spontaneous mutations. <i>Mutation Research - Reviews in Genetic Toxicology</i> , 1990 , 238, 297-304		48
53	Animal cell DNA polymerases in DNA repair. <i>Mutation Research DNA Repair</i> , 1990 , 236, 289-300		35
52	Structure-function relationships in <i>Escherichia coli</i> promoter DNA. <i>Progress in Molecular Biology and Translational Science</i> , 1990 , 38, 137-64		15
51	Sequence specificity of pausing by DNA polymerases. <i>Biochemical and Biophysical Research Communications</i> , 1989 , 164, 1149-56	3.4	16
50	On the fidelity of DNA replication: herpes DNA polymerase and its associated exonuclease. <i>Nucleic Acids Research</i> , 1987 , 15, 1185-98	20.1	17
49	Aphidicolin-resistant mutator strains of mouse teratocarcinoma. <i>Molecular Genetics and Genomics</i> , 1987 , 208, 342-8		4
48	DNA polymerase-alpha: enzymology, function, fidelity, and mutagenesis. <i>Progress in Molecular Biology and Translational Science</i> , 1986 , 33, 57-110		24
47	Fidelity of DNA polymerase-beta in neurons from young and very aged mice. <i>Journal of Neurochemistry</i> , 1985 , 45, 1273-8	6	22

46	Multipotent mutator strain of mouse teratocarcinoma cells. <i>Somatic Cell and Molecular Genetics</i> , 1985 , 11, 211-6		5
45	DNA polymerase alpha and models for proofreading. <i>Nucleic Acids Research</i> , 1985 , 13, 261-74	20.1	21
44	Apurinic sites as mutagenic intermediates. <i>Cell</i> , 1985 , 40, 483-4	56.2	282
43	Site specific mutagenesis: insertion of single noncomplementary nucleotides at specified sites by error-directed DNA polymerization. <i>Nucleic Acids Research</i> , 1984 , 12, 6615-28	20.1	14
42	Delayed and reduced cell replication and diminishing levels of DNA polymerase-alpha in regenerating liver of aging mice. <i>Journal of Cellular Physiology</i> , 1984 , 118, 225-32	7	75
41	Assessment of the carcinogenic potential of a proposed food coloring additive, laccaic acid, using short-term assays. <i>Cell Biology and Toxicology</i> , 1984 , 1, 111-25	7.4	4
40	UV irradiation alters deoxynucleoside triphosphate pools in Escherichia coli. <i>Mutation Research - DNA Repair Reports</i> , 1984 , 131, 97-100		15
39	Mouse teratocarcinoma cells resistant to aphidicolin and arabinofuranosyl cytosine: isolation and initial characterization. <i>Journal of Cellular Physiology</i> , 1983 , 115, 9-14	7	3
38	Rapid changes in deoxynucleoside triphosphate pools in mammalian cells treated with mutagens. <i>Biochemical and Biophysical Research Communications</i> , 1983 , 114, 458-64	3.4	57
37	Mechanisms of neoplastic transformation. <i>Cancer Investigation</i> , 1983 , 1, 175-83	2.1	7
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