

# Michael R Lieber

## 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.

158 papers	16,178 citations	66 h-index	126 g-index
232 ext. papers	17,876 ext. citations	12.2 avg, IF	7.19 L-index

#	Paper	IF	Citations
158	The mechanisms of human lymphoid chromosomal translocations and their medical relevance. <i>Critical Reviews in Biochemistry and Molecular Biology</i> , <b>2021</b> , 1-17	8.7	0
157	Preclinical Evaluation of a Novel Dual Targeting PI3K/BRD4 Inhibitor, SF2535, in B-Cell Acute Lymphoblastic Leukemia.. <i>Frontiers in Oncology</i> , <b>2021</b> , 11, 766888	5.3	0
156	The mRNA tether model for activation-induced deaminase and its relevance for Ig somatic hypermutation and class switch recombination.. <i>DNA Repair</i> , <b>2021</b> , 110, 103271	4.3	1
155	Mechanistic basis for chromosomal translocations at the E2A gene and its broader relevance to human B cell malignancies. <i>Cell Reports</i> , <b>2021</b> , 36, 109387	10.6	2
154	Nonhomologous DNA end joining of nucleosomal substrates in a purified system. <i>DNA Repair</i> , <b>2021</b> , 106, 103193	4.3	0
153	Structural analysis of the catalytic domain of Artemis endonuclease/SNM1C reveals distinct structural features. <i>Journal of Biological Chemistry</i> , <b>2020</b> , 295, 12368-12377	5.4	12
152	Polymerase $\beta$ in non-homologous DNA end joining: importance of the order of arrival at a double-strand break in a purified system. <i>Nucleic Acids Research</i> , <b>2020</b> , 48, 3605-3618	20.1	9
151	DNA-PKcs chemical inhibition versus genetic mutation: Impact on the junctional repair steps of V(D)J recombination. <i>Molecular Immunology</i> , <b>2020</b> , 120, 93-100	4.3	7
150	NAD <sup>+</sup> is not utilized as a co-factor for DNA ligation by human DNA ligase IV. <i>Nucleic Acids Research</i> , <b>2020</b> , 48, 12746-12750	20.1	1
149	Temporally uncoupled signal and coding joint formation in human V(D)J recombination. <i>Molecular Immunology</i> , <b>2020</b> , 128, 227-234	4.3	1
148	The molecular basis and disease relevance of non-homologous DNA end joining. <i>Nature Reviews Molecular Cell Biology</i> , <b>2020</b> , 21, 765-781	48.7	90
147	Current insights into the mechanism of mammalian immunoglobulin class switch recombination. <i>Critical Reviews in Biochemistry and Molecular Biology</i> , <b>2019</b> , 54, 333-351	8.7	37
146	The essential elements for the noncovalent association of two DNA ends during NHEJ synapsis. <i>Nature Communications</i> , <b>2019</b> , 10, 3588	17.4	45
145	Transposons to V(D)J Recombination: Evolution of the RAG Reaction. <i>Trends in Immunology</i> , <b>2019</b> , 40, 668-670	14.4	2
144	Structural evidence for an in base selection mechanism involving Loop1 in polymerase $\beta$ at an NHEJ double-strand break junction. <i>Journal of Biological Chemistry</i> , <b>2019</b> , 294, 10579-10595	5.4	6
143	Constitutively active Artemis nuclease recognizes structures containing single-stranded DNA configurations. <i>DNA Repair</i> , <b>2019</b> , 83, 102676	4.3	1
142	Nonhomologous DNA end-joining for repair of DNA double-strand breaks. <i>Journal of Biological Chemistry</i> , <b>2018</b> , 293, 10512-10523	5.4	233

141	Concept of DNA Lesion Longevity and Chromosomal Translocations. <i>Trends in Biochemical Sciences</i> , <b>2018</b> , 43, 490-498	10.3	6
140	DNA Repair After Exposure to Ionizing Radiation Is Not Error-Free. <i>Journal of Nuclear Medicine</i> , <b>2018</b> , 59, 348	8.9	6
139	Reply: Radiation Dose Does Matter: Mechanistic Insights into DNA Damage and Repair Support the Linear No-Threshold Model of Low-Dose Radiation Health Risks. <i>Journal of Nuclear Medicine</i> , <b>2018</b> , 59, 1780-1781	8.9	2
138	Radiation Dose Does Matter: Mechanistic Insights into DNA Damage and Repair Support the Linear No-Threshold Model of Low-Dose Radiation Health Risks. <i>Journal of Nuclear Medicine</i> , <b>2018</b> , 59, 1014-1016	8.9	13
137	Bridging of double-stranded breaks by the nonhomologous end-joining ligation complex is modulated by DNA end chemistry. <i>Nucleic Acids Research</i> , <b>2017</b> , 45, 1872-1878	20.1	28
136	Non-homologous DNA end joining and alternative pathways to double-strand break repair. <i>Nature Reviews Molecular Cell Biology</i> , <b>2017</b> , 18, 495-506	48.7	696
135	Effects of DNA end configuration on XRCC4-DNA ligase IV and its stimulation of Artemis activity. <i>Journal of Biological Chemistry</i> , <b>2017</b> , 292, 13914-13924	5.4	20
134	DNA Ligase IV Guides End-Processing Choice during Nonhomologous End Joining. <i>Cell Reports</i> , <b>2017</b> , 20, 2810-2819	10.6	34
133	AID and Reactive Oxygen Species Can Induce DNA Breaks within Human Chromosomal Translocation Fragile Zones. <i>Molecular Cell</i> , <b>2017</b> , 68, 901-912.e3	17.6	13
132	Structural step forward for NHEJ. <i>Cell Research</i> , <b>2017</b> , 27, 1304-1306	24.7	5
131	Different DNA End Configurations Dictate Which NHEJ Components Are Most Important for Joining Efficiency. <i>Journal of Biological Chemistry</i> , <b>2016</b> , 291, 24377-24389	5.4	60
130	Dissecting the Roles of Divergent and Convergent Transcription in Chromosome Instability. <i>Cell Reports</i> , <b>2016</b> , 14, 1025-1031	10.6	18
129	Structure-Specific nuclease activities of Artemis and the Artemis: DNA-PKcs complex. <i>Nucleic Acids Research</i> , <b>2016</b> , 44, 4991-7	20.1	35
128	Mechanisms of human lymphoid chromosomal translocations. <i>Nature Reviews Cancer</i> , <b>2016</b> , 16, 387-98	31.3	82
127	RNA Polymerase Collision versus DNA Structural Distortion: Twists and Turns Can Cause Break Failure. <i>Molecular Cell</i> , <b>2016</b> , 62, 327-334	17.6	7
126	SCR7 is neither a selective nor a potent inhibitor of human DNA ligase IV. <i>DNA Repair</i> , <b>2016</b> , 43, 18-23	4.3	48
125	A Meta-analysis of Multiple Myeloma Risk Regions in African and European Ancestry Populations Identifies Putatively Functional Loci. <i>Cancer Epidemiology Biomarkers and Prevention</i> , <b>2016</b> , 25, 1609-1618	11.4	13
124	Real-time analysis of RAG complex activity in V(D)J recombination. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, 11853-11858	11.5	12

123	Effect of CpG dinucleotides within IgH switch region repeats on immunoglobulin class switch recombination. <i>Molecular Immunology</i> , <b>2015</b> , 66, 284-9	4.3	4
122	Complexities due to single-stranded RNA during antibody detection of genomic rna:dna hybrids. <i>BMC Research Notes</i> , <b>2015</b> , 8, 127	2.3	26
121	Organization and dynamics of the nonhomologous end-joining machinery during DNA double-strand break repair. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2015</b> , 112, E2575-84	11.5	117
120	Human lymphoid translocation fragile zones are hypomethylated and have accessible chromatin. <i>Molecular and Cellular Biology</i> , <b>2015</b> , 35, 1209-22	4.8	6
119	The repetitive portion of the Xenopus IgH Mu switch region mediates orientation-dependent class switch recombination. <i>Molecular Immunology</i> , <b>2015</b> , 67, 524-31	4.3	2
118	Unifying the DNA end-processing roles of the artemis nuclease: Ku-dependent artemis resection at blunt DNA ends. <i>Journal of Biological Chemistry</i> , <b>2015</b> , 290, 24036-50	5.4	32
117	Convergent BCL6 and lncRNA promoters demarcate the major breakpoint region for BCL6 translocations. <i>Blood</i> , <b>2015</b> , 126, 1730-1	2.2	21
116	Mechanisms of clonal evolution in childhood acute lymphoblastic leukemia. <i>Nature Immunology</i> , <b>2015</b> , 16, 766-774	19.1	121
115	The strength of an Ig switch region is determined by its ability to drive R loop formation and its number of WGCW sites. <i>Cell Reports</i> , <b>2014</b> , 8, 557-69	10.6	27
114	Histone methylation and V(D)J recombination. <i>International Journal of Hematology</i> , <b>2014</b> , 100, 230-7	2.3	11
113	Modeling of the RAG reaction mechanism. <i>Cell Reports</i> , <b>2014</b> , 7, 307-315	10.6	8
112	The role of G-density in switch region repeats for immunoglobulin class switch recombination. <i>Nucleic Acids Research</i> , <b>2014</b> , 42, 13186-93	20.1	21
111	Evidence that the DNA endonuclease ARTEMIS also has intrinsic 5' exonuclease activity. <i>Journal of Biological Chemistry</i> , <b>2014</b> , 289, 7825-34	5.4	34
110	Non-homologous end joining often uses microhomology: implications for alternative end joining. <i>DNA Repair</i> , <b>2014</b> , 17, 74-80	4.3	86
109	Large chromosome deletions, duplications, and gene conversion events accumulate with age in normal human colon crypts. <i>Aging Cell</i> , <b>2013</b> , 12, 269-79	9.9	30
108	Detection and characterization of R-loops at the murine immunoglobulin S $\mu$ region. <i>Molecular Immunology</i> , <b>2013</b> , 54, 208-16	4.3	13
107	A noncatalytic function of the ligation complex during nonhomologous end joining. <i>Journal of Cell Biology</i> , <b>2013</b> , 200, 173-86	7.3	66
106	Both CpG methylation and activation-induced deaminase are required for the fragility of the human bcl-2 major breakpoint region: implications for the timing of the breaks in the t(14;18) translocation. <i>Molecular and Cellular Biology</i> , <b>2013</b> , 33, 947-57	4.8	22

105	BCL6 breaks occur at different AID sequence motifs in Ig-BCL6 and non-Ig-BCL6 rearrangements. <i>Blood</i> , <b>2013</b> , 121, 4551-4	2.2	27
104	Detection and Characterization of R-loops at the Murine Immunoglobulin S Region. <i>FASEB Journal</i> , <b>2013</b> , 27, lb203	0.9	
103	IgH partner breakpoint sequences provide evidence that AID initiates t(11;14) and t(8;14) chromosomal breaks in mantle cell and Burkitt lymphomas. <i>Blood</i> , <b>2012</b> , 120, 2864-7	2.2	51
102	Mechanistic basis for RAG discrimination between recombination sites and the off-target sites of human lymphomas. <i>Molecular and Cellular Biology</i> , <b>2012</b> , 32, 365-75	4.8	7
101	Formation of a G-quadruplex at the BCL2 major breakpoint region of the t(14;18) translocation in follicular lymphoma. <i>Nucleic Acids Research</i> , <b>2011</b> , 39, 936-48	20.1	93
100	Polynucleotide kinase and aprataxin-like forkhead-associated protein (PALF) acts as both a single-stranded DNA endonuclease and a single-stranded DNA 3' exonuclease and can participate in DNA end joining in a biochemical system. <i>Journal of Biological Chemistry</i> , <b>2011</b> , 286, 36368-77	5.4	38
99	Competition between the RNA transcript and the nontemplate DNA strand during R-loop formation in vitro: a nick can serve as a strong R-loop initiation site. <i>Molecular and Cellular Biology</i> , <b>2010</b> , 30, 146-59	4.8	104
98	Cytosines, but not purines, determine recombination activating gene (RAG)-induced breaks on heteroduplex DNA structures: implications for genomic instability. <i>Journal of Biological Chemistry</i> , <b>2010</b> , 285, 7587-97	5.4	23
97	Nonhomologous DNA end joining (NHEJ) and chromosomal translocations in humans. <i>Sub-Cellular Biochemistry</i> , <b>2010</b> , 50, 279-96	5.5	89
96	SnapShot: Nonhomologous DNA end joining (NHEJ). <i>Cell</i> , <b>2010</b> , 142, 496-496.e1	56.2	44
95	The t(14;18)(q32;q21)/IGH-MALT1 translocation in MALT lymphomas is a CpG-type translocation, but the t(11;18)(q21;q21)/API2-MALT1 translocation in MALT lymphomas is not. <i>Blood</i> , <b>2010</b> , 115, 3640-1; author reply 3641-2	2.2	18
94	t(X;14)(p22;q32)/t(Y;14)(p11;q32) CRLF2-IGH translocations from human B-lineage ALLs involve CpG-type breaks at CRLF2, but CRLF2/P2RY8 intrachromosomal deletions do not. <i>Blood</i> , <b>2010</b> , 116, 1993-4	2.2	15
93	The mechanism of double-strand DNA break repair by the nonhomologous DNA end-joining pathway. <i>Annual Review of Biochemistry</i> , <b>2010</b> , 79, 181-211	29.1	1875
92	Mechanisms of chromosomal rearrangement in the human genome. <i>BMC Genomics</i> , <b>2010</b> , 11 Suppl 1, S1	4.5	68
91	DNA-PKcs regulates a single-stranded DNA endonuclease activity of Artemis. <i>DNA Repair</i> , <b>2010</b> , 9, 429-34	3.3	45
90	Is there any genetic instability in human cancer?. <i>DNA Repair</i> , <b>2010</b> , 9, 858; discussion 859-60	4.3	14
89	Double-Strand Break Recognition and its Repair by Non-Homologous End-Joining <b>2010</b> , 2165-2170		
88	G clustering is important for the initiation of transcription-induced R-loops in vitro, whereas high G density without clustering is sufficient thereafter. <i>Molecular and Cellular Biology</i> , <b>2009</b> , 29, 3124-33	4.8	106

87	Conformational variants of duplex DNA correlated with cytosine-rich chromosomal fragile sites. <i>Journal of Biological Chemistry</i> , <b>2009</b> , 284, 7157-64	5.4	32
86	H3K4me3 stimulates the V(D)J RAG complex for both nicking and hairpinning in trans in addition to tethering in cis: implications for translocations. <i>Molecular Cell</i> , <b>2009</b> , 34, 535-44	17.6	100
85	Flexibility in the order of action and in the enzymology of the nuclease, polymerases, and ligase of vertebrate non-homologous DNA end joining: relevance to cancer, aging, and the immune system. <i>Cell Research</i> , <b>2008</b> , 18, 125-33	24.7	78
84	Turning anti-ageing genes against cancer. <i>Nature Reviews Molecular Cell Biology</i> , <b>2008</b> , 9, 903-10	48.7	30
83	FACT-mediated exchange of histone variant H2AX regulated by phosphorylation of H2AX and ADP-ribosylation of Spt16. <i>Molecular Cell</i> , <b>2008</b> , 30, 86-97	17.6	189
82	A biochemically defined system for coding joint formation in V(D)J recombination. <i>Molecular Cell</i> , <b>2008</b> , 31, 485-497	17.6	28
81	Human chromosomal translocations at CpG sites and a theoretical basis for their lineage and stage specificity. <i>Cell</i> , <b>2008</b> , 135, 1130-42	56.2	183
80	The mechanism of human nonhomologous DNA end joining. <i>Journal of Biological Chemistry</i> , <b>2008</b> , 283, 1-5	5.4	478
79	Unexpected complexity at breakpoint junctions in phenotypically normal individuals and mechanisms involved in generating balanced translocations t(1;22)(p36;q13). <i>Genome Research</i> , <b>2008</b> , 18, 1733-42	9.7	24
78	Mechanism of R-loop formation at immunoglobulin class switch sequences. <i>Molecular and Cellular Biology</i> , <b>2008</b> , 28, 50-60	4.8	109
77	Mechanistic aspects of lymphoid chromosomal translocations. <i>Journal of the National Cancer Institute Monographs</i> , <b>2008</b> , 8-11	4.8	10
76	Mechanistic flexibility as a conserved theme across 3 billion years of nonhomologous DNA end-joining. <i>Genes and Development</i> , <b>2008</b> , 22, 411-5	12.6	32
75	Mechanism of R-Loop formation at Immunoglobulin Class Switch sequences. <i>FASEB Journal</i> , <b>2008</b> , 22, 416-416	0.9	
74	DNA structure and human diseases. <i>Frontiers in Bioscience - Landmark</i> , <b>2007</b> , 12, 4402-8	2.8	20
73	XRCC4:DNA ligase IV can ligate incompatible DNA ends and can ligate across gaps. <i>EMBO Journal</i> , <b>2007</b> , 26, 1010-23	13	118
72	Length-dependent binding of human XLF to DNA and stimulation of XRCC4.DNA ligase IV activity. <i>Journal of Biological Chemistry</i> , <b>2007</b> , 282, 11155-62	5.4	85
71	Extent to which hairpin opening by the Artemis:DNA-PKcs complex can contribute to junctional diversity in V(D)J recombination. <i>Nucleic Acids Research</i> , <b>2007</b> , 35, 6917-23	20.1	23
70	Sequence dependence of chromosomal R-loops at the immunoglobulin heavy-chain Smu class switch region. <i>Molecular and Cellular Biology</i> , <b>2007</b> , 27, 5921-32	4.8	73

69	Single-stranded DNA ligation and XLF-stimulated incompatible DNA end ligation by the XRCC4-DNA ligase IV complex: influence of terminal DNA sequence. <i>Nucleic Acids Research</i> , <b>2007</b> , 35, 5755-62	20.1	99
68	The structure-specific nicking of small heteroduplexes by the RAG complex: implications for lymphoid chromosomal translocations. <i>DNA Repair</i> , <b>2007</b> , 6, 751-9	4.3	21
67	DNA structures at chromosomal translocation sites. <i>BioEssays</i> , <b>2006</b> , 28, 480-94	4.1	60
66	Severe combined immunodeficiency and microcephaly in siblings with hypomorphic mutations in DNA ligase IV. <i>European Journal of Immunology</i> , <b>2006</b> , 36, 224-35	6.1	164
65	Analysis of non-B DNA structure at chromosomal sites in the mammalian genome. <i>Methods in Enzymology</i> , <b>2006</b> , 409, 301-16	1.7	18
64	In vitro nonhomologous DNA end joining system. <i>Methods in Enzymology</i> , <b>2006</b> , 408, 502-10	1.7	8
63	DNA-PKcs dependence of Artemis endonucleolytic activity, differences between hairpins and 5Ror 3Roverhangs. <i>Journal of Biological Chemistry</i> , <b>2006</b> , 281, 33900-9	5.4	83
62	Downstream boundary of chromosomal R-loops at murine switch regions: implications for the mechanism of class switch recombination. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2006</b> , 103, 5030-5	11.5	56
61	Detection and structural analysis of R-loops. <i>Methods in Enzymology</i> , <b>2006</b> , 409, 316-29	1.7	25
60	Hybrid joint formation in human V(D)J recombination requires nonhomologous DNA end joining. <i>DNA Repair</i> , <b>2006</b> , 5, 278-85	4.3	12
59	Roles of nonhomologous DNA end joining, V(D)J recombination, and class switch recombination in chromosomal translocations. <i>DNA Repair</i> , <b>2006</b> , 5, 1234-45	4.3	142
58	The polymerases for V(D)J recombination. <i>Immunity</i> , <b>2006</b> , 25, 7-9	32.3	14
57	Repair of double-strand DNA breaks by the human nonhomologous DNA end joining pathway: the iterative processing model. <i>Cell Cycle</i> , <b>2005</b> , 4, 1193-200	4.7	89
56	The Artemis:DNA-PKcs endonuclease cleaves DNA loops, flaps, and gaps. <i>DNA Repair</i> , <b>2005</b> , 4, 845-51	4.3	128
55	The DNA-dependent protein kinase catalytic subunit phosphorylation sites in human Artemis. <i>Journal of Biological Chemistry</i> , <b>2005</b> , 280, 33839-46	5.4	104
54	Generation and characterization of endonuclease G null mice. <i>Molecular and Cellular Biology</i> , <b>2005</b> , 25, 294-302	4.8	80
53	Fine-structure analysis of activation-induced deaminase accessibility to class switch region R-loops. <i>Molecular and Cellular Biology</i> , <b>2005</b> , 25, 1730-6	4.8	51
52	Evidence for a triplex DNA conformation at the bcl-2 major breakpoint region of the t(14;18) translocation. <i>Journal of Biological Chemistry</i> , <b>2005</b> , 280, 22749-60	5.4	74



51	Double-strand break formation by the RAG complex at the bcl-2 major breakpoint region and at other non-B DNA structures in vitro. <i>Molecular and Cellular Biology</i> , <b>2005</b> , 25, 5904-19	4.8	62
50	Both V(D)J coding ends but neither signal end can recombine at the bcl-2 major breakpoint region, and the rejoining is ligase IV dependent. <i>Molecular and Cellular Biology</i> , <b>2005</b> , 25, 6475-84	4.8	25
49	Stability and strand asymmetry in the non-B DNA structure at the bcl-2 major breakpoint region. <i>Journal of Biological Chemistry</i> , <b>2004</b> , 279, 46213-25	5.4	20
48	Genetic interactions between BLM and DNA ligase IV in human cells. <i>Journal of Biological Chemistry</i> , <b>2004</b> , 279, 55433-42	5.4	49
47	Chromosomal Translocations and Non-B DNA Structures in the Human Genome. <i>Cell Cycle</i> , <b>2004</b> , 3, 760-766	4.6	34
46	Ageing, repetitive genomes and DNA damage. <i>Nature Reviews Molecular Cell Biology</i> , <b>2004</b> , 5, 69-75	48.7	93
45	Functional and biochemical dissection of the structure-specific nuclease ARTEMIS. <i>EMBO Journal</i> , <b>2004</b> , 23, 1987-97	13	110
44	A non-B-DNA structure at the Bcl-2 major breakpoint region is cleaved by the RAG complex. <i>Nature</i> , <b>2004</b> , 428, 88-93	50.4	197
43	DNA substrate length and surrounding sequence affect the activation-induced deaminase activity at cytidine. <i>Journal of Biological Chemistry</i> , <b>2004</b> , 279, 6496-500	5.4	148
42	Kinetic analysis of the nicking and hairpin formation steps in V(D)J recombination. <i>DNA Repair</i> , <b>2004</b> , 3, 67-75	4.3	7
41	The mechanism of vertebrate nonhomologous DNA end joining and its role in V(D)J recombination. <i>DNA Repair</i> , <b>2004</b> , 3, 817-26	4.3	181
40	A biochemically defined system for mammalian nonhomologous DNA end joining. <i>Molecular Cell</i> , <b>2004</b> , 16, 701-13	17.6	283
39	R-loops at immunoglobulin class switch regions in the chromosomes of stimulated B cells. <i>Nature Immunology</i> , <b>2003</b> , 4, 442-51	19.1	554
38	Mechanism and regulation of human non-homologous DNA end-joining. <i>Nature Reviews Molecular Cell Biology</i> , <b>2003</b> , 4, 712-20	48.7	769
37	Nucleic acid structures and enzymes in the immunoglobulin class switch recombination mechanism. <i>DNA Repair</i> , <b>2003</b> , 2, 1163-74	4.3	68
36	Impact of DNA ligase IV on the fidelity of end joining in human cells. <i>Nucleic Acids Research</i> , <b>2003</b> , 31, 2157-67	20.1	60
35	Oxygen metabolism causes chromosome breaks and is associated with the neuronal apoptosis observed in DNA double-strand break repair mutants. <i>Current Biology</i> , <b>2002</b> , 12, 397-402	6.3	155
34	The cleavage efficiency of the human immunoglobulin heavy chain VH elements by the RAG complex: implications for the immune repertoire. <i>Journal of Biological Chemistry</i> , <b>2002</b> , 277, 5040-6	5.4	31



33	Binding of inositol hexakisphosphate (IP6) to Ku but not to DNA-PKcs. <i>Journal of Biological Chemistry</i> , <b>2002</b> , 277, 10756-9	5.4	67
32	Prevalent involvement of illegitimate V(D)J recombination in chromosome 9p21 deletions in lymphoid leukemia. <i>Journal of Biological Chemistry</i> , <b>2002</b> , 277, 46289-97	5.4	47
31	Hairpin opening and overhang processing by an Artemis/DNA-dependent protein kinase complex in nonhomologous end joining and V(D)J recombination. <i>Cell</i> , <b>2002</b> , 108, 781-94	56.2	832
30	Bidirectional gene organization: a common architectural feature of the human genome. <i>Cell</i> , <b>2002</b> , 109, 807-9	56.2	276
29	The embryonic lethality in DNA ligase IV-deficient mice is rescued by deletion of Ku: implications for unifying the heterogeneous phenotypes of NHEJ mutants. <i>DNA Repair</i> , <b>2002</b> , 1, 1017-26	4.3	79
28	Analysis of the V(D)J recombination efficiency at lymphoid chromosomal translocation breakpoints. <i>Journal of Biological Chemistry</i> , <b>2001</b> , 276, 29126-33	5.4	106
27	Antibody diversity: a link between switching and hypermutation. <i>Current Biology</i> , <b>2000</b> , 10, R798-800	6.3	11
26	The nicking step in V(D)J recombination is independent of synapsis: implications for the immune repertoire. <i>Molecular and Cellular Biology</i> , <b>2000</b> , 20, 7914-21	4.8	61
25	Efficient processing of DNA ends during yeast nonhomologous end joining. Evidence for a DNA polymerase beta (Pol4)-dependent pathway. <i>Journal of Biological Chemistry</i> , <b>1999</b> , 274, 23599-609	5.4	161
24	The biochemistry and biological significance of nonhomologous DNA end joining: an essential repair process in multicellular eukaryotes. <i>Genes To Cells</i> , <b>1999</b> , 4, 77-85	2.3	137
23	The nonhomologous DNA end joining pathway is important for chromosome stability in primary fibroblasts. <i>Current Biology</i> , <b>1999</b> , 9, 1501-4	6.3	115
22	Mechanistic basis for coding end sequence effects in the initiation of V(D)J recombination. <i>Molecular and Cellular Biology</i> , <b>1999</b> , 19, 8094-102	4.8	42
21	DNA ligase IV binds to XRCC4 via a motif located between rather than within its BRCT domains. <i>Current Biology</i> , <b>1998</b> , 8, 873-6	6.3	124
20	V(D)J recombination activity in human hematopoietic cells: correlation with developmental stage and genome stability. <i>European Journal of Immunology</i> , <b>1998</b> , 28, 351-8	6.1	21
19	DNA ligase IV is essential for V(D)J recombination and DNA double-strand break repair in human precursor lymphocytes. <i>Molecular Cell</i> , <b>1998</b> , 2, 477-84	17.6	282
18	Warner-Lambert/Parke-Davis Award Lecture. Pathological and physiological double-strand breaks: roles in cancer, aging, and the immune system. <i>American Journal of Pathology</i> , <b>1998</b> , 153, 1323-32	5.8	99
17	Requirement for an interaction of XRCC4 with DNA ligase IV for wild-type V(D)J recombination and DNA double-strand break repair in vivo. <i>Journal of Biological Chemistry</i> , <b>1998</b> , 273, 24708-14	5.4	127
16	Productive and nonproductive complexes of Ku and DNA-dependent protein kinase at DNA termini. <i>Molecular and Cellular Biology</i> , <b>1998</b> , 18, 5908-20	4.8	141

15	The RAG-HMG1 complex enforces the 12/23 rule of V(D)J recombination specifically at the double-hairpin formation step. <i>Molecular and Cellular Biology</i> , <b>1998</b> , 18, 6408-15	4.8	68
14	Activity of DNA ligase IV stimulated by complex formation with XRCC4 protein in mammalian cells. <i>Nature</i> , <b>1997</b> , 388, 492-5	50.4	520
13	Yeast DNA ligase IV mediates non-homologous DNA end joining. <i>Nature</i> , <b>1997</b> , 388, 495-8	50.4	342
12	The FEN-1 family of structure-specific nucleases in eukaryotic DNA replication, recombination and repair. <i>BioEssays</i> , <b>1997</b> , 19, 233-40	4.1	399
11	RNA:DNA complex formation upon transcription of immunoglobulin switch regions: implications for the mechanism and regulation of class switch recombination. <i>Nucleic Acids Research</i> , <b>1995</b> , 23, 5006-11	20.1	173
10	Lagging strand DNA synthesis at the eukaryotic replication fork involves binding and stimulation of FEN-1 by proliferating cell nuclear antigen. <i>Journal of Biological Chemistry</i> , <b>1995</b> , 270, 22109-12	5.4	221
9	DNA structural elements required for FEN-1 binding. <i>Journal of Biological Chemistry</i> , <b>1995</b> , 270, 4503-8	5.4	72
8	Analysis of individual immunoglobulin lambda light chain genes amplified from single cells is inconsistent with variable region gene conversion in germinal-center B cell somatic mutation. <i>European Journal of Immunology</i> , <b>1994</b> , 24, 1816-22	6.1	31
7	Extent to which homology can constrain coding exon junctional diversity in V(D)J recombination. <i>Nature</i> , <b>1993</b> , 363, 625-7	50.4	83
6	DEAE-dextran enhances electroporation of mammalian cells. <i>Nucleic Acids Research</i> , <b>1992</b> , 20, 6739-40	20.1	61
5	Site-specific recombination in the immune system. <i>FASEB Journal</i> , <b>1991</b> , 5, 2934-44	0.9	147
4	The defect in murine severe combined immune deficiency: joining of signal sequences but not coding segments in V(D)J recombination. <i>Cell</i> , <b>1988</b> , 55, 7-16	56.2	420
3	Extrachromosomal DNA substrates in pre-B cells undergo inversion or deletion at immunoglobulin V-(D)-J joining signals. <i>Cell</i> , <b>1987</b> , 49, 775-83	56.2	341
2	Microinjection of Culture Cells via Fusion with Loaded Erythrocytes <b>1987</b> , 457-478		4
1	Chromatin Structure Near an Expressed Gene <b>1987</b> , 99-109		3