Stewart Shuman

List of Publications by Year
in descending order

346 papers	14,706 citations	19657 61 h-index	37204 96 g-index
349 all docs	349 docs citations	349 times ranked	8173 citing authors

#	Article	IF	Citations
1	Distinct Roles for CTD Ser-2 and Ser-5 Phosphorylation in the Recruitment and Allosteric Activation of Mammalian mRNA Capping Enzyme. Molecular Cell, 1999, 3, 405-411.	9.7	297
2	What messenger RNA capping tells us about eukaryotic evolution. Nature Reviews Molecular Cell Biology, 2002, 3, 619-625.	37.0	296
3	Friction and torque govern the relaxation of DNA supercoils by eukaryotic topoisomerase IB. Nature, 2005, 434, 671-674.	27.8	287
4	X-Ray Crystallography Reveals a Large Conformational Change during Guanyl Transfer by mRNA Capping Enzymes. Cell, 1997, 89, 545-553.	28.9	260
5	Structure, mechanism, and evolution of the mRNA capping apparatus. Progress in Molecular Biology and Translational Science, 2000, 66, 1-40.	1.9	252
6	Bacterial DNA repair by non-homologous end joining. Nature Reviews Microbiology, 2007, 5, 852-861.	28.6	245
7	Conservation of Structure and Mechanism between Eukaryotic Topoisomerase I and Site-Specific Recombinases. Cell, 1998, 92, 841-850.	28.9	235
8	RNA capping enzyme and DNA ligase: a superfamily of covalent nucleotidyl transferases. Molecular Microbiology, 1995, 17, 405-420.	2.5	227
9	The DExH protein NPH-II is a processive and directional motor for unwinding RNA. Nature, 2000, 403, 447-451.	27.8	209
10	Structure of an mRNA Capping Enzyme Bound to the Phosphorylated Carboxy-Terminal Domain of RNA Polymerase II. Molecular Cell, 2003, 11, 1549-1561.	9.7	192
11	Mechanism of nonhomologous end-joining in mycobacteria: a low-fidelity repair system driven by Ku, ligase D and ligase C. Nature Structural and Molecular Biology, 2005, 12, 304-312.	8.2	190
12	Division of labor among<i>Mycobacterium smegmatis</i>RNase H enzymes: RNase H1 activity of RnhA or RnhC is essential for growth whereas RnhB and RnhA guard against killing by hydrogen peroxide in stationary phase. Nucleic Acids Research, 2017, 45, 1-14.	14.5	183
13	The polynucleotide ligase and RNA capping enzyme superfamily of covalent nucleotidyltransferases. Current Opinion in Structural Biology, 2004, 14, 757-764.	5.7	167
14	Structure and mechanism of T4 polynucleotide kinase: an RNA repair enzyme. EMBO Journal, 2002, 21, 3873-3880.	7.8	162
15	Catalytic Mechanism of DNA Topoisomerase IB. Molecular Cell, 2000, 5, 1035-1041.	9.7	155
16	Crystal Structure of Eukaryotic DNA Ligaseâ€“Adenylate Illuminates the Mechanism of Nick Sensing and Strand Joining. Molecular Cell, 2000, 6, 1183-1193.	9.7	149
17	Modified Vaccinia Virus Ankara Triggers Type I IFN Production in Murine Conventional Dendritic Cells via a cGAS/STING-Mediated Cytosolic DNA-Sensing Pathway. PLoS Pathogens, 2014, 10, e1003989.	4.7	148
18	Site-Specific Ribonuclease Activity of Eukaryotic DNA Topoisomerase I. Molecular Cell, 1997, 1, 89-97.	9.7	147

#	Article	IF	Citations
19	DNA Ligases: Progress and Prospects. Journal of Biological Chemistry, 2009, 284, 17365-17369.	3.4	146
20	Bacteriophage T4 RNA ligase 2 (gp24.1) exemplifies a family of RNA ligases found in all phylogenetic domains. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 12709-12714.	7.1	145
21	RtcB Is the RNA Ligase Component of an Escherichia coli RNA Repair Operon. Journal of Biological Chemistry, 2011, 286, 7727-7731.	3.4	143
22	Structure and Mechanism of Yeast RNA Triphosphatase. Cell, 1999, 99, 533-543.	28.9	140
23	Structure and Mechanism of mRNA Cap (Guanine-N7) Methyltransferase. Molecular Cell, 2004, 13, 77-89.	9.7	138
24	Structure-function analysis of the kinase-CPD domain of yeast tRNA ligase (Trl1) and requirements for complementation of tRNA splicing by a plant Trl1 homolog. Nucleic Acids Research, 2006, 34, 517-527.	14.5	137
25	Domain Structure and Mutational Analysis of T4 Polynucleotide Kinase. Journal of Biological Chemistry, 2001, 276, 26868-26874.	3.4	128
26	Biochemical and Genetic Analysis of the Four DNA Ligases of Mycobacteria. Journal of Biological Chemistry, 2004, 279, 20594-20606.	3.4	127
27	Tat Stimulates Cotranscriptional Capping of HIV mRNA. Molecular Cell, 2002, 10, 585-597.	9.7	125
28	Structure and Mechanism of RNA Ligase. Structure, 2004, 12, 327-339.	3.3	125
29	Interactions between Fission Yeast mRNA Capping Enzymes and Elongation Factor Spt5. Journal of Biological Chemistry, 2002, 277, 19639-19648.	3.4	122
30	Deciphering the RNA Polymerase II CTD Code in Fission Yeast. Molecular Cell, 2011, 43, 311-318.	9.7	109
31	Vaccinia DNA topoisomerase I: Single-turnover and steady-state kinetic analysis of the DNA strand cleavage and ligation reactions. Biochemistry, 1994, 33, 327-339.	2.5	107
32	Vaccinia virus DNA ligase: specificity, fidelity, and inhibition. Biochemistry, 1995, 34, 16138-16147.	2.5	106
33	The pathways and outcomes of mycobacterial NHEJ depend on the structure of the broken DNA ends. Genes and Development, 2008, 22, 512-527.	5.9	102
34	Intratumoral delivery of inactivated modified vaccinia virus Ankara (iMVA) induces systemic antitumor immunity via STING and Batf3-dependent dendritic cells. Science Immunology, 2017, 2, .	11.9	101
35	Mycobacteria exploit three genetically distinct DNA doubleâ€strand break repair pathways. Molecular Microbiology, 2011, 79, 316-330.	2.5	96
36	RNA ligase RtcB splices 3â€²-phosphate and 5â€²-OH ends via covalent RtcB-(histidinyl)-GMP and polynucleotide-(3â€²)pp(5â€²)G intermediates. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 6072-6077.	7.1	94

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37	Novel Mechanism of RNA Repair by RtcB via Sequential 2â€²,3â€²-Cyclic Phosphodiesterase and 3â€²-Phosphate/5â€²-Hydroxyl Ligation Reactions. Journal of Biological Chemistry, 2011, 286, 43134-43143.	3.4	93
38	RtcB, a Novel RNA Ligase, Can Catalyze tRNA Splicing and HAC1 mRNA Splicing in Vivo. Journal of Biological Chemistry, 2011, 286, 30253-30257.	3.4	93
39	Vaccinia virus DNA topoisomerase: a model eukaryotic type IB enzyme. Biochimica Et Biophysica Acta Gene Regulatory Mechanisms, 1998, 1400, 321-337.	2.4	86
40	Mutational analysis of Chlorella virus DNA ligase: catalytic roles of domain I and motif VI. Nucleic Acids Research, 1998, 26, 4618-4625.	14.5	85
41	Mycobacterial Nonhomologous End Joining Mediates Mutagenic Repair of Chromosomal Double-Strand DNA Breaks. Journal of Bacteriology, 2007, 189, 5237-5246.	2.2	84
42	AdnAB: a new DSB-resecting motorâ€“nuclease from mycobacteria. Genes and Development, 2009, 23, 1423-1437.	5.9	82
43	Last Stop on the Road to Repair: Structure of E. coli DNA Ligase Bound to Nicked DNA-Adenylate. Molecular Cell, 2007, 26, 257-271.	9.7	81
44	Genetic and Biochemical Analysis of the Functional Domains of Yeast tRNA Ligase. Journal of Biological Chemistry, 2003, 278, 43928-43938.	3.4	79
45	RNA Ligase Structures Reveal the Basis for RNA Specificity and Conformational Changes that Drive Ligation Forward. Cell, 2006, 127, 71-84.	28.9	78
46	Yeast and Viral RNA 5â€² Triphosphatases Comprise a New Nucleoside Triphosphatase Family. Journal of Biological Chemistry, 1998, 273, 34151-34156.	3.4	77
47	RNA Substrate Specificity and Structure-guided Mutational Analysis of Bacteriophage T4 RNA Ligase 2. Journal of Biological Chemistry, 2004, 279, 31337-31347.	3.4	76
48	How an RNA Ligase Discriminates RNA versus DNA Damage. Molecular Cell, 2004, 16, 211-221.	9.7	76
49	The Structure of Fcp1, an Essential RNA Polymerase II CTD Phosphatase. Molecular Cell, 2008, 32, 478-490.	9.7	76
50	A poxvirus-like type IB topoisomerase family in bacteria. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 1853-1858.	7.1	75
51	Structural basis for nick recognition by a minimal pluripotent DNA ligase. Nature Structural and Molecular Biology, 2007, 14, 770-778.	8.2	74
52	Characterization of Human, Schizosaccharomyces pombe, and Candida albicans mRNA Cap Methyltransferases and Complete Replacement of the Yeast Capping Apparatus by Mammalian Enzymes. Journal of Biological Chemistry, 1999, 274, 16553-16562.	3.4	73
53	RNA Repair: An Antidote to Cytotoxic Eukaryal RNA Damage. Molecular Cell, 2008, 31, 278-286.	9.7	71
54	Genetic, Physical, and Functional Interactions between the Triphosphatase and Guanylyltransferase Components of the Yeast mRNA Capping Apparatus. Molecular and Cellular Biology, 1998, 18, 5189-5198.	2.3	70

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55	RNA 5â€²-Triphosphatase, Nucleoside Triphosphatase, and Guanylyltransferase Activities of Baculovirus LEF-4 Protein. Journal of Virology, 1998, 72, 10020-10028.	3.4	70
56	Specificity and fidelity of strand joining by Chlorella virus DNA ligase. Nucleic Acids Research, 1998, 26, 3536-3541.	14.5	69
57	Mycobacterial UvrD1 Is a Ku-dependent DNA Helicase That Plays a Role in Multiple DNA Repair Events, Including Double-strand Break Repair. Journal of Biological Chemistry, 2007, 282, 15114-15125.	3.4	66
58	Portability and fidelity of RNA-repair systems. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 2788-2793.	7.1	65
59	Genetic and Biochemical Analysis of Yeast and Human Cap Trimethylguanosine Synthase. Journal of Biological Chemistry, 2008, 283, 31706-31718.	3.4	65
60	The Length, Phosphorylation State, and Primary Structure of the RNA Polymerase II Carboxyl-terminal Domain Dictate Interactions with mRNA Capping Enzymes. Journal of Biological Chemistry, 2001, 276, 28075-28082.	3.4	64
61	Mutational analysis defines the 5'-kinase and 3'-phosphatase active sites of T4 polynucleotide kinase. Nucleic Acids Research, 2002, 30, 1073-1080.	14.5	64
62	Mechanism of DNA transesterification by vaccinia topoisomerase: catalytic contributions of essential residues Arg-130, Gly-132, Tyr-136 and Lys-167. Nucleic Acids Research, 1997, 25, 3001-3008.	14.5	63
63	Stereochemical Outcome and Kinetic Effects ofRp- andSp-Phosphorothioate Substitutions at the Cleavage Site of Vaccinia Type I DNA Topoisomeraseâ€. Biochemistry, 2000, 39, 5561-5572.	2.5	63
64	Proton Relay Mechanism of General Acid Catalysis by DNA Topoisomerase IB. Journal of Biological Chemistry, 2002, 277, 5711-5714.	3.4	62
65	Structure-Function Analysis of T4 RNA Ligase 2. Journal of Biological Chemistry, 2003, 278, 17601-17608.	3.4	62
66	Atomic structure and nonhomologous end-joining function of the polymerase component of bacterial DNA ligase D. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 1711-1716.	7.1	62
67	Characterization of the Schizosaccharomyces pombe Cdk9/Pch1 Protein Kinase. Journal of Biological Chemistry, 2003, 278, 43346-43356.	3.4	61
68	A Function of Yeast mRNA Cap Methyltransferase, Abd1, in Transcription by RNA Polymerase II. Molecular Cell, 2004, 13, 377-387.	9.7	61
69	Crystal Structure and Nonhomologous End-joining Function of the Ligase Component of Mycobacterium DNA Ligase D. Journal of Biological Chemistry, 2006, 281, 13412-13423.	3.4	61
70	A Phosphate-binding Histidine of Binuclear Metallophosphodiesterase Enzymes Is a Determinant of 2â€²,3â€²-Cyclic Nucleotide Phosphodiesterase Activity. Journal of Biological Chemistry, 2008, 283, 30942-30949.	3.4	60
71	Mutational Analysis of Vaccinia DNA Ligase Defines Residues Essential for Covalent Catalysis. Virology, 1995, 211, 73-83.	2.4	58
72	A Primer-dependent Polymerase Function of Pseudomonas aeruginosa ATP-dependent DNA Ligase (LigD). Journal of Biological Chemistry, 2005, 280, 418-427.	3.4	58

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73	Footprinting of Chlorella Virus DNA Ligase Bound at a Nick in Duplex DNA. Journal of Biological Chemistry, 1999, 274, 14032-14039.	3.4	57
74	NAD+-dependent DNA Ligase Encoded by a Eukaryotic Virus. Journal of Biological Chemistry, 2001, 276, 36100-36109.	3.4	57
75	Structure-function analysis of yeast RNA debranching enzyme (Dbr1), a manganese-dependent phosphodiesterase. Nucleic Acids Research, 2005, 33, 6349-6360.	14.5	57
76	Human RNA 5â€²-kinase (hClp1) can function as a tRNA splicing enzyme in vivo. Rna, 2008, 14, 1737-1745.	3.5	57
77	Separable Functions of the Fission Yeast Spt5 Carboxyl-Terminal Domain (CTD) in Capping Enzyme Binding and Transcription Elongation Overlap with Those of the RNA Polymerase II CTD. Molecular and Cellular Biology, 2010, 30, 2353-2364.	2.3	57
78	Mechanism of RNA 2â€²,3â€²-cyclic phosphate end healing by T4 polynucleotide kinaseâ€"phosphatase. Nucleic Acids Research, 2013, 41, 355-365.	14.5	57
79	Structure-Function Analysis of the mRNA Cap Methyltransferase of Saccharomyces cerevisiae. Journal of Biological Chemistry, 1997, 272, 14683-14689.	3.4	55
80	HIV-1 Tat Protein Interacts with Mammalian Capping Enzyme and Stimulates Capping of TAR RNA. Journal of Biological Chemistry, 2001, 276, 12959-12966.	3.4	55
81	Structure-function analysis of yeast tRNA ligase. Rna, 2005, 11, 966-975.	3.5	55
82	The Nucleoside Triphosphatase and Helicase Activities of Vaccinia Virus NPH-II Are Essential for Virus Replication. Journal of Virology, 1998, 72, 4729-4736.	3.4	55
83	Novel 3â€²-Ribonuclease and 3â€²-Phosphatase Activities of the Bacterial Non-homologous End-joining Protein, DNA Ligase D. Journal of Biological Chemistry, 2005, 280, 25973-25981.	3.4	54
84	Individual letters of the RNA polymerase II CTD code govern distinct gene expression programs in fission yeast. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 4185-4190.	7.1	53
85	Cyclin-Dependent Kinase 9 (Cdk9) of Fission Yeast Is Activated by the CDK-Activating Kinase Csk1, Overlaps Functionally with the TFIIH-Associated Kinase Mcs6, and Associates with the mRNA Cap Methyltransferase Pcm1 In Vivo. Molecular and Cellular Biology, 2006, 26, 777-788.	2.3	51
86	Mutational Analysis of 39 Residues of Vaccinia DNA Topoisomerase Identifies Lys-220, Arg-223, and Asn-228 as Important for Covalent Catalysis. Journal of Biological Chemistry, 1997, 272, 8263-8269.	3.4	50
87	Conserved Residues in Domain Ia Are Required for the Reaction of Escherichia coli DNA Ligase with NAD+. Journal of Biological Chemistry, 2002, 277, 9695-9700.	3.4	50
88	Histidine 265 Is Important for Covalent Catalysis by Vaccinia Topoisomerase and Is Conserved in All Eukaryotic Type I Enzymes. Journal of Biological Chemistry, 1997, 272, 3891-3896.	3.4	49
89	Bacterial Nonhomologous End Joining Ligases Preferentially Seal Breaks with a 3â€²-OH Monoribonucleotide. Journal of Biological Chemistry, 2008, 283, 8331-8339.	3.4	49
90	Structure-Function Analysis of Yeast mRNA Cap Methyltransferase and High-Copy Suppression of Conditional Mutants by AdoMet Synthase and the Ubiquitin Conjugating Enzyme Cdc34p. Genetics, 2000, 155, 1561-1576.	2.9	49

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91	Vaccinia DNA Topoisomerase I: Kinetic Evidence for General Acid-Base Catalysis and a Conformational Step. Biochemistry, 1994, 33, 15449-15458.	2.5	47
92	Mutational Analysis of Bacteriophage T4 RNA Ligase 1. Journal of Biological Chemistry, 2003, 278, 29454-29462.	3.4	47
93	Transcription of lncRNA prt, clustered prt RNA sites for Mmi1 binding, and RNA polymerase II CTD phospho-sites govern the repression of pho1 gene expression under phosphate-replete conditions in fission yeast. Rna, 2016, 22, 1011-1025.	3.5	47
94	Domain Requirements for DNA Unwinding by Mycobacterial UvrD2, an Essential DNA Helicase. Biochemistry, 2008, 47, 9355-9364.	2.5	46
95	The sequential 2',3'-cyclic phosphodiesterase and 3'-phosphate/5'-OH ligation steps of the RtcB RNA splicing pathway are GTP-dependent. Nucleic Acids Research, 2012, 40, 8558-8567.	14.5	46
96	Mammalian 2â€²,3â€² cyclic nucleotide phosphodiesterase (CNP) can function as a tRNA splicing enzyme in vivo. Rna, 2008, 14, 204-210.	3.5	45
97	The PAF Complex and Prf1/Rtf1 Delineate Distinct Cdk9-Dependent Pathways Regulating Transcription Elongation in Fission Yeast. PLoS Genetics, 2013, 9, e1004029.	3.5	45
98	Proteolytic Footprinting of Vaccinia Topoisomerase Bound to DNA. Journal of Biological Chemistry, 1995, 270, 11636-11645.	3.4	44
99	Mutational Analyses of Yeast RNA Triphosphatases Highlight a Common Mechanism of Metal-dependent NTP Hydrolysis and a Means of Targeting Enzymes to Pre-mRNAs in Vivo by Fusion to the Guanylyltransferase Component of the Capping Apparatus. Journal of Biological Chemistry, 1999, 274, 28865-28874.	3.4	44
100	Structure-Function Analysis of the Active Site Tunnel of Yeast RNA Triphosphatase. Journal of Biological Chemistry, 2001, 276, 17261-17266.	3.4	42
101	An end-healing enzyme from Clostridium thermocellum with 5' kinase, 2',3' phosphatase, and adenylyltransferase activities. Rna, 2005, 11, 1271-1280.	3.5	42
102	A Conserved Domain of Yeast RNA Triphosphatase Flanking the Catalytic Core Regulates Self-association and Interaction with the Guanylyltransferase Component of the mRNA Capping Apparatus. Journal of Biological Chemistry, 1999, 274, 22668-22678.	3.4	41
103	Characterization of Mimivirus DNA Topoisomerase IB Suggests Horizontal Gene Transfer between Eukaryal Viruses and Bacteria. Journal of Virology, 2006, 80, 314-321.	3.4	41
104	Punctuation and syntax of the RNA polymerase II CTD code in fission yeast. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 18024-18029.	7.1	41
105	Crystal Structure of Vaccinia Virus mRNA Capping Enzyme Provides Insights into the Mechanism and Evolution of the Capping Apparatus. Structure, 2014, 22, 452-465.	3.3	41
106	Role of nucleotidyltransferase motifs I, III and IV in the catalysis of phosphodiester bond formation by Chlorella virus DNA ligase. Nucleic Acids Research, 2002, 30, 903-911.	14.5	40
107	Specificity and Mechanism of RNA Cap Guanine-N2 Methyltransferase (Tgs1). Journal of Biological Chemistry, 2005, 280, 4021-4024.	3.4	40
108	Characterization of a Trifunctional Mimivirus mRNAÂCapping Enzyme and Crystal Structure of the RNA Triphosphatase Domain. Structure, 2008, 16, 501-512.	3.3	40

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109	How an mRNA capping enzyme reads distinct RNA polymerase II and Spt5 CTD phosphorylation codes. Genes and Development, 2014, 28, 1323-1336.	5.9	40
110	Peptide inhibitors of DNA cleavage by tyrosine recombinases and topoisomerases. Journal of Molecular Biology, 2000, 299, 1203-1216.	4.2	39
111	Characterization of the mRNA Capping Apparatus of the Microsporidian Parasite Encephalitozoon cuniculi. Journal of Biological Chemistry, 2002, 277, 96-103.	3.4	39
112	Guarding the Genome. Molecular Cell, 2003, 12, 199-208.	9.7	39
113	Characterization of a Baculovirus Enzyme with RNA Ligase, Polynucleotide 5â€²-Kinase, and Polynucleotide 3â€²-Phosphatase Activities. Journal of Biological Chemistry, 2004, 279, 18220-18231.	3.4	38
114	Characterization of three mycobacterial DinB (DNA polymerase IV) paralogs highlights DinB2 as naturally adept at ribonucleotide incorporation. Nucleic Acids Research, 2014, 42, 11056-11070.	14.5	38
115	Inositol pyrophosphates impact phosphate homeostasis via modulation of RNA 3â€² processing and transcription termination. Nucleic Acids Research, 2019, 47, 8452-8469.	14.5	38
116	Transcriptional interference at tandem lncRNA and protein-coding genes: an emerging theme in regulation of cellular nutrient homeostasis. Nucleic Acids Research, 2020, 48, 8243-8254.	14.5	38
117	Requirements for noncovalent binding of vaccinia topoisomerase I to duplex DNA. Nucleic Acids Research, 1994, 22, 5360-5365.	14.5	37
118	Characterization of Agrobacterium tumefaciens DNA ligases C and D. Nucleic Acids Research, 2007, 35, 3631-3645.	14.5	37
119	Mutational Analysis of the Guanylyltransferase Component of Mammalian mRNA Capping Enzyme. Biochemistry, 2003, 42, 8240-8249.	2.5	36
120	Characterization of a Thermophilic ATP-Dependent DNA Ligase from the Euryarchaeon Pyrococcus horikoshii. Journal of Bacteriology, 2005, 187, 6902-6908.	2.2	36
121	Encephalitozoon cuniculi mRNA Cap (Guanine N-7) Methyltransferase. Journal of Biological Chemistry, 2005, 280, 20404-20412.	3.4	36
122	Gap Filling Activities of Pseudomonas DNA Ligase D (LigD) Polymerase and Functional Interactions of LigD with the DNA End-binding Ku Protein. Journal of Biological Chemistry, 2010, 285, 4815-4825.	3.4	36
123	Rewriting the rules for end joining via enzymatic splicing of DNA 3'-PO4 and 5'-OH ends. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 20437-20442.	7.1	36
124	Chlorella Virus RNA Triphosphatase. Journal of Biological Chemistry, 2002, 277, 15317-15324.	3.4	35
125	Mycobacterium smegmatis DinB2 misincorporates deoxyribonucleotides and ribonucleotides during templated synthesis and lesion bypass. Nucleic Acids Research, 2014, 42, 12722-12734.	14.5	35
126	A dual role for mycobacterial RecO in RecA-dependent homologous recombination and RecA-independent single-strand annealing. Nucleic Acids Research, 2013, 41, 2284-2295.	14.5	34

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127	Remote Phosphate Contacts Trigger Assembly of the Active Site of DNA Topoisomerase IB. Structure, 2004, 12, 31-40.	3.3	33
128	RNA polymerase II CTD interactome with 3â€² processing and termination factors in fission yeast and its impact on phosphate homeostasis. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E10652-E10661.	7.1	33
129	NAD+-dependent synthesis of a 5â€²-phospho-ADP-ribosylated RNA/DNA cap by RNA 2â€²-phosphotransferase Tpt1. Nucleic Acids Research, 2018, 46, 9617-9624.	14.5	33
130	Vaccinia Virus mRNA (Guanine-7-)Methyltransferase:Â Mutational Effects on Cap Methylation and AdoHcy-Dependent Photo-Cross-Linking of the Cap to the Methyl Acceptor Siteâ€. Biochemistry, 1996, 35, 6900-6910.	2.5	32
131	An essential surface motif (WAQKW) of yeast RNA triphosphatase mediates formation of the mRNA capping enzyme complex with RNA guanylyltransferase. Nucleic Acids Research, 1999, 27, 4671-4678.	14.5	32
132	Characterization of the mRNA Capping Apparatus of Candida albicans. Journal of Biological Chemistry, 2001, 276, 1857-1864.	3.4	32
133	An RNA Ligase from Deinococcus radiodurans. Journal of Biological Chemistry, 2004, 279, 50654-50661.	3.4	32
134	Mechanistic Plasticity of DNA Topoisomerase IB: Phosphate Electrostatics Dictate the Need for a Catalytic Arginine. Structure, 2005, 13, 513-520.	3.3	32
135	Structure-function analysis of the yeast NAD+-dependent tRNA 2'-phosphotransferase Tpt1. Rna, 2005, 11, 107-113.	3.5	32
136	Essential Constituents of the 3â€²-Phosphoesterase Domain of Bacterial DNA Ligase D, a Nonhomologous End-joining Enzyme. Journal of Biological Chemistry, 2005, 280, 33707-33715.	3.4	32
137	Mutational Analysis of Encephalitozoon cuniculi mRNA Cap (Guanine-N7) Methyltransferase, Structure of the Enzyme Bound to Sinefungin, and Evidence That Cap Methyltransferase Is the Target of Sinefungin's Antifungal Activity. Journal of Biological Chemistry, 2006, 281, 35904-35913.	3.4	32
138	Structure-function analysis of Plasmodium RNA triphosphatase and description of a triphosphate tunnel metalloenzyme superfamily that includes Cet1-like RNA triphosphatases and CYTH proteins. Rna, 2006, 12, 1468-1474.	3.5	32
139	Mutational Analysis of Mycobacterium UvrD1 Identifies Functional Groups Required for ATP Hydrolysis, DNA Unwinding, and Chemomechanical Coupling. Biochemistry, 2009, 48, 4019-4030.	2.5	32
140	An essential role for trimethylguanosine RNA caps in Saccharomyces cerevisiae meiosis and their requirement for splicing of SAE3 and PCH2 meiotic pre - mRNAs. Nucleic Acids Research, 2011, 39, 5633-5646.	14.5	32
141	A kinetic framework for tRNA ligase and enforcement of a 2â€²-phosphate requirement for ligation highlights the design logic of an RNA repair machine. Rna, 2013, 19, 659-669.	3.5	32
142	2â€²-Phosphate cyclase activity of RtcA: a potential rationale for the operon organization of RtcA with an RNA repair ligase RtcB in <i>Escherichia coli</i> and other bacterial taxa. Rna, 2013, 19, 1355-1362.	3.5	32
143	RNA polymerase II CTD phospho-sites Ser5 and Ser7 govern phosphate homeostasis in fission yeast. Rna, 2015, 21, 1770-1780.	3.5	32
144	Analysis of the DNA joining repertoire of Chlorella virus DNA ligase and a new crystal structure of the ligase-adenylate intermediate. Nucleic Acids Research, 2003, 31, 5090-5100.	14.5	31

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145	Yeast-like mRNA Capping Apparatus in Giardia lamblia. Journal of Biological Chemistry, 2005, 280, 12077-12086.	3.4	31
146	Distinct Enzymic Functional Groups Are Required for the Phosphomonoesterase and Phosphodiesterase Activities of Clostridium thermocellum Polynucleotide Kinase/Phosphatase. Journal of Biological Chemistry, 2006, 281, 19251-19259.	3.4	31
147	Characterization of the 2',3' cyclic phosphodiesterase activities of Clostridium thermocellum polynucleotide kinase-phosphatase and bacteriophage Â phosphatase. Nucleic Acids Research, 2007, 35, 7721-7732.	14.5	31
148	Composition of yeast snRNPs and snoRNPs in the absence of trimethylguanosine caps reveals nuclear cap binding protein as a gained U1 component implicated in the cold-sensitivity of tgs1Î” cells. Nucleic Acids Research, 2011, 39, 6715-6728.	14.5	31
149	RNA capping: progress and prospects. Rna, 2015, 21, 735-737.	3.5	31
150	Factor-dependent Release of Nascent RNA by Ternary Complexes of Vaccinia RNA Polymerase. Journal of Biological Chemistry, 1996, 271, 19556-19562.	3.4	30
151	Nucleotide Misincorporation, 3â€²-Mismatch Extension, and Responses to Abasic Sites and DNA Adducts by the Polymerase Component of Bacterial DNA Ligase D. Journal of Biological Chemistry, 2006, 281, 25026-25040.	3.4	30
152	Bacterial Hen1 is a 3â€² terminal RNA ribose 2â€²-O-methyltransferase component of a bacterial RNA repair cassette. Rna, 2010, 16, 316-323.	3.5	30
153	A long noncoding (lnc)RNA governs expression of the phosphate transporter Pho84 in fission yeast and has cascading effects on the flanking prt lncRNA and pho1 genes. Journal of Biological Chemistry, 2018, 293, 4456-4467.	3.4	30
154	Ligation of RNA-Containing Duplexes by Vaccinia DNA Ligase. Biochemistry, 1997, 36, 9073-9079.	2.5	29
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