## Timothy M Lohman

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65 118 14,304 149 h-index g-index citations papers 160 6.36 15,386 9.2 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
149	Thermodynamic analysis of ion effects on the binding and conformational equilibria of proteins and nucleic acids: the roles of ion association or release, screening, and ion effects on water activity. <i>Quarterly Reviews of Biophysics</i> , <b>1978</b> , 11, 103-78	7	1435
148	Ion effects on ligand-nucleic acid interactions. Journal of Molecular Biology, 1976, 107, 145-58	6.5	965
147	Mechanisms of helicase-catalyzed DNA unwinding. <i>Annual Review of Biochemistry</i> , <b>1996</b> , 65, 169-214	29.1	668
146	Escherichia coli single-stranded DNA-binding protein: multiple DNA-binding modes and cooperativities. <i>Annual Review of Biochemistry</i> , <b>1994</b> , 63, 527-70	29.1	543
145	Probing single-stranded DNA conformational flexibility using fluorescence spectroscopy. Biophysical Journal, <b>2004</b> , 86, 2530-7	2.9	479
144	Major domain swiveling revealed by the crystal structures of complexes of E. coli Rep helicase bound to single-stranded DNA and ADP. <i>Cell</i> , <b>1997</b> , 90, 635-47	56.2	448
143	Initiation and re-initiation of DNA unwinding by the Escherichia coli Rep helicase. <i>Nature</i> , <b>2002</b> , 419, 63	8- <del>4</del> 1.4	390
142	SSB as an organizer/mobilizer of genome maintenance complexes. <i>Critical Reviews in Biochemistry and Molecular Biology</i> , <b>2008</b> , 43, 289-318	8.7	378
141	Structure of the DNA binding domain of E. coli SSB bound to ssDNA. <i>Nature Structural Biology</i> , <b>2000</b> , 7, 648-52		366
140	Non-hexameric DNA helicases and translocases: mechanisms and regulation. <i>Nature Reviews Molecular Cell Biology</i> , <b>2008</b> , 9, 391-401	48.7	261
139	Interpretation of monovalent and divalent cation effects on the lac repressor-operator interaction. <i>Biochemistry</i> , <b>1977</b> , 16, 4791-6	3.2	244
138	Repetitive shuttling of a motor protein on DNA. <i>Nature</i> , <b>2005</b> , 437, 1321-5	50.4	233
137	Large-scale overproduction and rapid purification of the Escherichia coli ssb gene product. Expression of the ssb gene under lambda PL control. <i>Biochemistry</i> , <b>1986</b> , 25, 21-5	3.2	214
136	SSB protein diffusion on single-stranded DNA stimulates RecA filament formation. <i>Nature</i> , <b>2009</b> , 461, 1092-7	50.4	203
135	Pentalysine-deoxyribonucleic acid interactions: a model for the general effects of ion concentrations on the interactions of proteins with nucleic acids. <i>Biochemistry</i> , <b>1980</b> , 19, 3522-30	3.2	191
134	Mechanism of ATP-dependent translocation of E.coli UvrD monomers along single-stranded DNA. <i>Journal of Molecular Biology</i> , <b>2004</b> , 344, 1287-309	6.5	170
133	Escherichia coli single-strand binding protein forms multiple, distinct complexes with single-stranded DNA. <i>Biochemistry</i> , <b>1986</b> , 25, 7799-802	3.2	169

132	A Dimer of Escherichia coli UvrD is the active form of the helicase in vitro. <i>Journal of Molecular Biology</i> , <b>2003</b> , 325, 913-35	6.5	168
131	Kinetics of protein-nucleic acid interactions: use of salt effects to probe mechanisms of interaction. <i>Critical Reviews in Biochemistry</i> , <b>1986</b> , 19, 191-245		159
130	Salt-dependent changes in the DNA binding co-operativity of Escherichia coli single strand binding protein. <i>Journal of Molecular Biology</i> , <b>1986</b> , 187, 603-15	6.5	152
129	Equilibrium binding of Escherichia coli single-strand binding protein to single-stranded nucleic acids in the (SSB)65 binding mode. Cation and anion effects and polynucleotide specificity. <i>Biochemistry</i> , <b>1988</b> , 27, 456-71	3.2	150
128	DNA-binding orientation and domain conformation of the E. coli rep helicase monomer bound to a partial duplex junction: single-molecule studies of fluorescently labeled enzymes. <i>Journal of Molecular Biology</i> , <b>2004</b> , 336, 395-408	6.5	144
127	SSB functions as a sliding platform that migrates on DNA via reptation. <i>Cell</i> , <b>2011</b> , 146, 222-32	56.2	138
126	PcrA helicase dismantles RecA filaments by reeling in DNA in uniform steps. <i>Cell</i> , <b>2010</b> , 142, 544-55	56.2	133
125	Protein structure. Direct observation of structure-function relationship in a nucleic acid-processing enzyme. <i>Science</i> , <b>2015</b> , 348, 352-4	33.3	124
124	General methods for analysis of sequential "n-step" kinetic mechanisms: application to single turnover kinetics of helicase-catalyzed DNA unwinding. <i>Biophysical Journal</i> , <b>2003</b> , 85, 2224-39	2.9	120
123	E. coli Rep oligomers are required to initiate DNA unwinding in vitro. <i>Journal of Molecular Biology</i> , <b>2001</b> , 310, 327-50	6.5	120
122	Na+ effects on transition of DNA and polynucleotides of variable linear charge density. <i>Biopolymers</i> , <b>1976</b> , 15, 893-915	2.2	117
121	The C-terminal domain of full-length E. coli SSB is disordered even when bound to DNA. <i>Protein Science</i> , <b>2004</b> , 13, 1942-7	6.3	115
120	Srs2 disassembles Rad51 filaments by a protein-protein interaction triggering ATP turnover and dissociation of Rad51 from DNA. <i>Molecular Cell</i> , <b>2009</b> , 35, 105-15	17.6	113
119	Dynamic structural rearrangements between DNA binding modes of E. coli SSB protein. <i>Journal of Molecular Biology</i> , <b>2007</b> , 369, 1244-57	6.5	112
118	Autoinhibition of Escherichia coli Rep monomer helicase activity by its 2B subdomain. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 10076-81	11.5	112
117	Thermodynamics of ligand-nucleic acid interactions. <i>Methods in Enzymology</i> , <b>1992</b> , 212, 400-24	1.7	108
116	Escherichia coli rep helicase unwinds DNA by an active mechanism. <i>Biochemistry</i> , <b>1993</b> , 32, 6815-20	3.2	106
115	A general method of analysis of ligand-macromolecule equilibria using a spectroscopic signal from the ligand to monitor binding. Application to Escherichia coli single-strand binding protein-nucleic acid interactions. <i>Biochemistry</i> , <b>1987</b> , 26, 3099-106	3.2	106

114	Single-molecule views of protein movement on single-stranded DNA. <i>Annual Review of Biophysics</i> , <b>2012</b> , 41, 295-319	21.1	102
113	A nonuniform stepping mechanism for E. coli UvrD monomer translocation along single-stranded DNA. <i>Molecular Cell</i> , <b>2007</b> , 26, 335-47	17.6	102
112	Thermodynamic methods for model-independent determination of equilibrium binding isotherms for protein-DNA interactions: spectroscopic approaches to monitor binding. <i>Methods in Enzymology</i> , <b>1991</b> , 208, 258-90	1.7	102
111	Comparisons between the structures of HCV and Rep helicases reveal structural similarities between SF1 and SF2 super-families of helicases. <i>Protein Science</i> , <b>1998</b> , 7, 605-10	6.3	97
110	Single-turnover kinetics of helicase-catalyzed DNA unwinding monitored continuously by fluorescence energy transfer. <i>Biochemistry</i> , <b>1994</b> , 33, 14306-16	3.2	96
109	An oligomeric form of E. coli UvrD is required for optimal helicase activity. <i>Journal of Molecular Biology</i> , <b>1999</b> , 293, 815-34	6.5	95
108	Co-operative binding of Escherichia coli SSB tetramers to single-stranded DNA in the (SSB)35 binding mode. <i>Journal of Molecular Biology</i> , <b>1994</b> , 236, 106-23	6.5	94
107	A semiempirical extension of polyelectrolyte theory to the treatment of oligoelectrolytes: Application to oligonucleotide helix-coil transitions. <i>Biopolymers</i> , <b>1978</b> , 17, 159-166	2.2	93
106	Bacillus stearothermophilus PcrA monomer is a single-stranded DNA translocase but not a processive helicase in vitro. <i>Journal of Biological Chemistry</i> , <b>2007</b> , 282, 27076-27085	5.4	90
105	DNA-induced dimerization of the Escherichia coli Rep helicase. <i>Journal of Molecular Biology</i> , <b>1991</b> , 221, 1165-81	6.5	86
104	Diffusion of human replication protein A along single-stranded DNA. <i>Journal of Molecular Biology</i> , <b>2014</b> , 426, 3246-3261	6.5	85
103	Apparent heat capacity change accompanying a nonspecific protein-DNA interaction. Escherichia coli SSB tetramer binding to oligodeoxyadenylates. <i>Biochemistry</i> , <b>1994</b> , 33, 12896-910	3.2	85
102	Calorimetric studies of E. coli SSB protein-single-stranded DNA interactions. Effects of monovalent salts on binding enthalpy. <i>Journal of Molecular Biology</i> , <b>1998</b> , 278, 999-1014	6.5	84
101	Overexpression, purification, DNA binding, and dimerization of the Escherichia coli uvrD gene product (helicase II). <i>Biochemistry</i> , <b>1993</b> , 32, 602-12	3.2	84
100	Stopped-flow studies of the kinetics of single-stranded DNA binding and wrapping around the Escherichia coli SSB tetramer. <i>Biochemistry</i> , <b>2002</b> , 41, 6032-44	3.2	83
99	Thermodynamics of charged oligopeptide-heparin interactions. <i>Biochemistry</i> , <b>1995</b> , 34, 2908-15	3.2	83
98	DNA unwinding step-size of E. coli RecBCD helicase determined from single turnover chemical quenched-flow kinetic studies. <i>Journal of Molecular Biology</i> , <b>2002</b> , 324, 409-28	6.5	82
97	A highly salt-dependent enthalpy change for Escherichia coli SSB protein-nucleic acid binding due to ion-protein interactions. <i>Biochemistry</i> , <b>1996</b> , 35, 5272-9	3.2	82

96	Analysis of ion concentration effects of the kinetics of protein-nucleic acid interactions. Application to lac repressor-operator interactions. <i>Biophysical Chemistry</i> , <b>1978</b> , 8, 281-94	3.5	80	
95	Regulation of single-stranded DNA binding by the C termini of Escherichia coli single-stranded DNA-binding (SSB) protein. <i>Journal of Biological Chemistry</i> , <b>2010</b> , 285, 17246-52	5.4	73	
94	Kinetic mechanism of direct transfer of Escherichia coli SSB tetramers between single-stranded DNA molecules. <i>Biochemistry</i> , <b>2002</b> , 41, 11611-27	3.2	71	
93	Adenine base unstacking dominates the observed enthalpy and heat capacity changes for the Escherichia coli SSB tetramer binding to single-stranded oligoadenylates. <i>Biochemistry</i> , <b>1999</b> , 38, 7388-	9 <del>3</del> .2	70	
92	Negative cooperativity within individual tetramers of Escherichia coli single strand binding protein is responsible for the transition between the (SSB)35 and (SSB)56 DNA binding modes. <i>Biochemistry</i> , <b>1988</b> , 27, 2260-5	3.2	70	
91	Fluorescence stopped-flow studies of single turnover kinetics of E.coli RecBCD helicase-catalyzed DNA unwinding. <i>Journal of Molecular Biology</i> , <b>2004</b> , 339, 731-50	6.5	69	
90	Negative co-operativity in Escherichia coli single strand binding protein-oligonucleotide interactions. I. Evidence and a quantitative model. <i>Journal of Molecular Biology</i> , <b>1989</b> , 207, 249-68	6.5	69	
89	Negative co-operativity in Escherichia coli single strand binding protein-oligonucleotide interactions. II. Salt, temperature and oligonucleotide length effects. <i>Journal of Molecular Biology</i> , <b>1989</b> , 207, 269-88	6.5	69	
88	Limited co-operativity in protein-nucleic acid interactions. A thermodynamic model for the interactions of Escherichia coli single strand binding protein with single-stranded nucleic acids in the "beaded", (SSB)65 mode. <i>Journal of Molecular Biology</i> , <b>1987</b> , 195, 897-907	6.5	69	
87	Direct imaging of single UvrD helicase dynamics on long single-stranded DNA. <i>Nature Communications</i> , <b>2013</b> , 4, 1878	17.4	68	
86	On the cooperative binding of large ligands to a one-dimensional homogeneous lattice: the generalized three-state lattice model. <i>Biopolymers</i> , <b>1989</b> , 28, 1637-43	2.2	67	
85	Intrinsically disordered C-terminal tails of E. coli single-stranded DNA binding protein regulate cooperative binding to single-stranded DNA. <i>Journal of Molecular Biology</i> , <b>2015</b> , 427, 763-774	6.5	65	
84	Srs2 prevents Rad51 filament formation by repetitive motion on DNA. <i>Nature Communications</i> , <b>2013</b> , 4, 2281	17.4	64	
83	Saccharomyces cerevisiae replication protein A binds to single-stranded DNA in multiple salt-dependent modes. <i>Biochemistry</i> , <b>2006</b> , 45, 11958-73	3.2	62	
82	ATP-dependent translocation of proteins along single-stranded DNA: models and methods of analysis of pre-steady state kinetics. <i>Journal of Molecular Biology</i> , <b>2004</b> , 344, 1265-86	6.5	61	
81	Staying on track: common features of DNA helicases and microtubule motors. <i>Cell</i> , <b>1998</b> , 93, 9-12	56.2	60	
80	Nonspecific ligand-DNA equilibrium binding parameters determined by fluorescence methods. <i>Methods in Enzymology</i> , <b>1992</b> , 212, 424-58	1.7	60	
79	Linkage of pH, anion and cation effects in protein-nucleic acid equilibria. Escherichia coli SSB protein-single stranded nucleic acid interactions. <i>Journal of Molecular Biology</i> , <b>1994</b> , 236, 165-78	6.5	59	

78	The 2B domain of the Escherichia coli Rep protein is not required for DNA helicase activity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2002</b> , 99, 16006-11	11.5	57
77	Kinetics and mechanism of the association of the bacteriophage T4 gene 32 (helix destabilizing) protein with single-stranded nucleic acids. Evidence for protein translocation. <i>Journal of Molecular Biology</i> , <b>1981</b> , 152, 67-109	6.5	56
76	Structural dynamics of E. coli single-stranded DNA binding protein reveal DNA wrapping and unwrapping pathways. <i>ELife</i> , <b>2015</b> , 4,	8.9	56
75	Binding specificity of Escherichia coli single-stranded DNA binding protein for the chi subunit of DNA pol III holoenzyme and PriA helicase. <i>Biochemistry</i> , <b>2010</b> , 49, 3555-66	3.2	55
74	Microsecond dynamics of protein-DNA interactions: direct observation of the wrapping/unwrapping kinetics of single-stranded DNA around the E. coli SSB tetramer. <i>Journal of Molecular Biology</i> , <b>2006</b> , 359, 55-65	6.5	55
73	Defining Single Molecular Forces Required for Notch Activation Using Nano Yoyo. <i>Nano Letters</i> , <b>2016</b> , 16, 3892-7	11.5	52
72	Large contributions of coupled protonation equilibria to the observed enthalpy and heat capacity changes for ssDNA binding to Escherichia coli SSB protein. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>2000</b> , Suppl 4, 8-22	4.2	51
71	Multiple C-terminal tails within a single E. coli SSB homotetramer coordinate DNA replication and repair. <i>Journal of Molecular Biology</i> , <b>2013</b> , 425, 4802-19	6.5	49
70	Rotations of the 2B sub-domain of E. coli UvrD helicase/translocase coupled to nucleotide and DNA binding. <i>Journal of Molecular Biology</i> , <b>2011</b> , 411, 633-48	6.5	49
69	Kinetic mechanism of DNA binding and DNA-induced dimerization of the Escherichia coli Rephelicase. <i>Biochemistry</i> , <b>1996</b> , 35, 2268-82	3.2	47
68	Dynamics of E. coli single stranded DNA binding (SSB) protein-DNA complexes. <i>Seminars in Cell and Developmental Biology</i> , <b>2019</b> , 86, 102-111	7.5	43
67	Kinetic mechanism for formation of the active, dimeric UvrD helicase-DNA complex. <i>Journal of Biological Chemistry</i> , <b>2003</b> , 278, 31930-40	5.4	43
66	Self-association equilibria of Escherichia coli UvrD helicase studied by analytical ultracentrifugation. Journal of Molecular Biology, <b>2003</b> , 325, 889-912	6.5	41
65	Effects of temperature and ATP on the kinetic mechanism and kinetic step-size for E.coli RecBCD helicase-catalyzed DNA unwinding. <i>Journal of Molecular Biology</i> , <b>2004</b> , 339, 751-71	6.5	41
64	Ultrafast redistribution of E. coli SSB along long single-stranded DNA via intersegment transfer. <i>Journal of Molecular Biology</i> , <b>2014</b> , 426, 2413-21	6.5	40
63	Kinetics and mechanism of dissociation of cooperatively bound T4 gene 32 protein-single-stranded nucleic acid complexes. 1. Irreversible dissociation induced by sodium chloride concentration jumps. <i>Biochemistry</i> , <b>1984</b> , 23, 4656-65	3.2	40
62	Escherichia coli RecBC helicase has two translocase activities controlled by a single ATPase motor. <i>Nature Structural and Molecular Biology</i> , <b>2010</b> , 17, 1210-7	17.6	39
61	Active displacement of RecA filaments by UvrD translocase activity. <i>Nucleic Acids Research</i> , <b>2015</b> , 43, 4133-49	20.1	38

60	ATPase activity of Escherichia coli Rep helicase is dramatically dependent on DNA ligation and protein oligomeric states. <i>Biochemistry</i> , <b>1996</b> , 35, 5726-34	3.2	37	
59	Monomers of the Escherichia coli SSB-1 mutant protein bind single-stranded DNA. <i>Journal of Molecular Biology</i> , <b>1991</b> , 217, 63-74	6.5	36	
58	5SSingle-stranded/duplex DNA junctions are loading sites for E. coli UvrD translocase. <i>EMBO Journal</i> , <b>2010</b> , 29, 3826-39	13	34	
57	Glutamate promotes SSB protein-protein Interactions via intrinsically disordered regions. <i>Journal of Molecular Biology</i> , <b>2017</b> , 429, 2790-2801	6.5	32	
56	Kinetics and mechanism of dissociation of cooperatively bound T4 gene 32 protein-single-stranded nucleic acid complexes. 2. Changes in mechanism as a function of sodium chloride concentration and other solution variables. <i>Biochemistry</i> , <b>1984</b> , 23, 4665-75	3.2	32	
55	Plasmodium falciparum SSB tetramer wraps single-stranded DNA with similar topology but opposite polarity to E. coli SSB. <i>Journal of Molecular Biology</i> , <b>2012</b> , 420, 269-83	6.5	31	
54	Energetics of DNA end binding by E.coli RecBC and RecBCD helicases indicate loop formation in the 3Ssingle-stranded DNA tail. <i>Journal of Molecular Biology</i> , <b>2005</b> , 352, 765-82	6.5	31	
53	Binding of the dimeric Deinococcus radiodurans single-stranded DNA binding protein to single-stranded DNA. <i>Biochemistry</i> , <b>2010</b> , 49, 8266-75	3.2	30	
52	Effects of monovalent anions on a temperature-dependent heat capacity change for Escherichia coli SSB tetramer binding to single-stranded DNA. <i>Biochemistry</i> , <b>2006</b> , 45, 5190-205	3.2	29	
51	ATP hydrolysis stimulates binding and release of single stranded DNA from alternating subunits of the dimeric E. coli Rep helicase: implications for ATP-driven helicase translocation. <i>Journal of Molecular Biology</i> , <b>1996</b> , 263, 411-22	6.5	29	
50	Chemo-mechanical pushing of proteins along single-stranded DNA. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, 6194-9	11.5	29	
49	SSB-DNA binding monitored by fluorescence intensity and anisotropy. <i>Methods in Molecular Biology</i> , <b>2012</b> , 922, 55-83	1.4	27	
48	Cooperative binding of polyamines induces the Escherichia coli single-strand binding protein-DNA binding mode transitions. <i>Biochemistry</i> , <b>1992</b> , 31, 6166-74	3.2	27	
47	Single-stranded DNA translocation of E. coli UvrD monomer is tightly coupled to ATP hydrolysis. Journal of Molecular Biology, <b>2012</b> , 418, 32-46	6.5	26	
46	Ensemble methods for monitoring enzyme translocation along single stranded nucleic acids. <i>Methods</i> , <b>2010</b> , 51, 269-76	4.6	26	
45	A two-site mechanism for ATP hydrolysis by the asymmetric Rep dimer P2S as revealed by site-specific inhibition with ADP-A1F4. <i>Biochemistry</i> , <b>1997</b> , 36, 3115-25	3.2	26	
44	Effects of base composition on the negative cooperativity and binding mode transitions of Escherichia coli SSB-single-stranded DNA complexes. <i>Biochemistry</i> , <b>1994</b> , 33, 6167-76	3.2	24	
43	Plasmodium falciparum SSB tetramer binds single-stranded DNA only in a fully wrapped mode. Journal of Molecular Biology, <b>2012</b> , 420, 284-95	6.5	23	

42	A mutation in E. coli SSB protein (W54S) alters intra-tetramer negative cooperativity and inter-tetramer positive cooperativity for single-stranded DNA binding. <i>Biophysical Chemistry</i> , <b>1997</b> , 64, 235-51	3.5	23
41	Large domain movements upon UvrD dimerization and helicase activation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, 12178-12183	11.5	22
40	A novel chlorophyll protein complex in the repair cycle of photosystem II. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 21907-21913	11.5	21
39	Model for the irreversible dissociation kinetics of cooperatively bound protein-nucleic acid complexes. <i>Biopolymers</i> , <b>1983</b> , 22, 1697-713	2.2	21
38	Kinetics of Escherichia coli helicase II-catalyzed unwinding of fully duplex and nicked circular DNA. <i>Biochemistry</i> , <b>1993</b> , 32, 4128-38	3.2	20
37	Probing 3SssDNA loop formation in E. coli RecBCD/RecBC-DNA complexes using non-natural DNA: a model for "Chi" recognition complexes. <i>Journal of Molecular Biology</i> , <b>2006</b> , 362, 26-43	6.5	19
36	Influence of DNA end structure on the mechanism of initiation of DNA unwinding by the Escherichia coli RecBCD and RecBC helicases. <i>Journal of Molecular Biology</i> , <b>2008</b> , 382, 312-26	6.5	18
35	Structural Mechanisms of Cooperative DNA Binding by Bacterial Single-Stranded DNA-Binding Proteins. <i>Journal of Molecular Biology</i> , <b>2019</b> , 431, 178-195	6.5	17
34	UvrD helicase activation by MutL involves rotation of its 2B subdomain. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 16320-16325	11.5	16
33	Fluorescence methods to study DNA translocation and unwinding kinetics by nucleic acid motors. <i>Methods in Molecular Biology</i> , <b>2012</b> , 875, 85-104	1.4	16
32	Are the intrinsically disordered linkers involved in SSB binding to accessory proteins?. <i>Nucleic Acids Research</i> , <b>2019</b> , 47, 8581-8594	20.1	15
31	The primary and secondary translocase activities within E. coli RecBC helicase are tightly coupled to ATP hydrolysis by the RecB motor. <i>Journal of Molecular Biology</i> , <b>2012</b> , 423, 303-14	6.5	15
30	Asymmetric regulation of bipolar single-stranded DNA translocation by the two motors within Escherichia coli RecBCD helicase. <i>Journal of Biological Chemistry</i> , <b>2013</b> , 288, 1055-64	5.4	15
29	Interactions of the E. coli single strand binding (SSB) protein with ss nucleic acids. Binding mode transitions and equilibrium binding studies. <i>Biochemical Pharmacology</i> , <b>1988</b> , 37, 1781-2	6	15
28	Kinetic mechanism for the sequential binding of two single-stranded oligodeoxynucleotides to the Escherichia coli Rep helicase dimer. <i>Biochemistry</i> , <b>1998</b> , 37, 891-9	3.2	14
27	Protein Environment and DNA Orientation Affect Protein-Induced Cy3 Fluorescence Enhancement. <i>Biophysical Journal</i> , <b>2019</b> , 117, 66-73	2.9	13
26	Kinetics of motor protein translocation on single-stranded DNA. <i>Methods in Molecular Biology</i> , <b>2010</b> , 587, 45-56	1.4	13
25	Kinetic control of Mg2+-dependent melting of duplex DNA ends by Escherichia coli RecBC. <i>Journal of Molecular Biology</i> , <b>2008</b> , 378, 761-77	6.5	12

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24	Regulation of Nearest-Neighbor Cooperative Binding of E. coli SSB Protein to DNA. <i>Biophysical Journal</i> , <b>2019</b> , 117, 2120-2140	2.9	12
23	Regulation of Rep helicase unwinding by an auto-inhibitory subdomain. <i>Nucleic Acids Research</i> , <b>2019</b> , 47, 2523-2532	20.1	11
22	DNA helicases, motors that move along nucleic acids: Lessons from the SF1 helicase superfamily. <i>The Enzymes</i> , <b>2003</b> , 303-VII	2.3	11
21	SSB binding to ssDNA using isothermal titration calorimetry. <i>Methods in Molecular Biology</i> , <b>2012</b> , 922, 37-54	1.4	10
20	Self-assembly of Escherichia coli MutL and its complexes with DNA. <i>Biochemistry</i> , <b>2011</b> , 50, 7868-80	3.2	10
19	Regulation of UvrD Helicase Activity by MutL. <i>Journal of Molecular Biology</i> , <b>2018</b> , 430, 4260-4274	6.5	10
18	Single-molecule nanopositioning: structural transitions of a helicase-DNA complex during ATP hydrolysis. <i>Biophysical Journal</i> , <b>2011</b> , 101, 976-84	2.9	9
17	E. coli SSB tetramer binds the first and second molecules of (dT)(35) with heat capacities of opposite sign. <i>Biophysical Chemistry</i> , <b>2011</b> , 159, 48-57	3.5	8
16	Is a fully wrapped SSB-DNA complex essential for Escherichia coli survival?. <i>Nucleic Acids Research</i> , <b>2016</b> , 44, 4317-29	20.1	8
15	Modulation of Escherichia coli UvrD Single-Stranded DNA Translocation by DNA Base Composition. <i>Biophysical Journal</i> , <b>2017</b> , 113, 1405-1415	2.9	7
14	How Does a Helicase Unwind DNA? Insights from RecBCD Helicase. <i>BioEssays</i> , <b>2018</b> , 40, e1800009	4.1	7
13	Processive DNA Unwinding by RecBCD Helicase in the Absence of Canonical Motor Translocation. <i>Journal of Molecular Biology</i> , <b>2016</b> , 428, 2997-3012	6.5	7
12	Development of a single-stranded DNA-binding protein fluorescent fusion toolbox. <i>Nucleic Acids Research</i> , <b>2020</b> , 48, 6053-6067	20.1	5
11	Allosteric effects of SSB C-terminal tail on assembly of E. coli RecOR proteins. <i>Nucleic Acids Research</i> , <b>2021</b> , 49, 1987-2004	20.1	4
10	Comparative Analysis of CPI-Motif Regulation of Biochemical Functions of Actin Capping Protein. <i>Biochemistry</i> , <b>2020</b> , 59, 1202-1215	3.2	3
9	Clipping along. Journal of Molecular Biology, <b>2010</b> , 399, 663-4	6.5	2
8	Kinetic and structural mechanism for DNA unwinding by a non-hexameric helicase. <i>Nature Communications</i> , <b>2021</b> , 12, 7015	17.4	2
7	Regulation of E. coli Rep helicase activity by PriC. <i>Journal of Molecular Biology</i> , <b>2021</b> , 433, 167072	6.5	2

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5	DNA Helicases: Dimeric Enzyme Action <b>2004</b> , 618-623		1
4	DNA repair helicase UvrD1 is activated by redox-dependent dimerization via a 2B domain cysteine <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2022</b> , 119,	11.5	1
3	Heterogeneity in E. coli RecBCD Helicase-DNA Binding and Base Pair Melting. <i>Journal of Molecular Biology</i> , <b>2021</b> , 433, 167147	6.5	O
2	Probing E.Itoli SSB protein-DNA topology by reversing DNA backbone polarity. <i>Biophysical Journal</i> , <b>2021</b> , 120, 1522-1533	2.9	
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