# Timothy M Lohman

List of Publications by Year
in descending order



| 149 | 16,652 | 12303 | 16127 |
|---|---|---|---|
| papers | citations | 69 h-index | 124 g-index |

| 160 | 160 | 160 | 6563 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | 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. Quarterly Reviews of Biophysics, 1978, 11, 103-178. | 2.4 | 1,606 |
| 2 | Ion effects on ligand-nucleic acid interactions. Journal of Molecular Biology, 1976, 107, 145-158. | 2.0 | 1,057 |
| 3 | Mechanisms of Helicase-Catalyzed DNA Unwinding. Annual Review of Biochemistry, 1996, 65, 169-214. | 5.0 | 728 |
| 4 | Escherichia Coli Single-Stranded DNA-Binding Protein: Multiple DNA-Binding Modes and Cooperativities. Annual Review of Biochemistry, 1994, 63, 527-570. | 5.0 | 606 |
| 5 | Probing Single-Stranded DNA Conformational Flexibility Using Fluorescence Spectroscopy. Biophysical Journal, 2004, 86, 2530-2537. | 0.2 | 565 |
| 6 | Major Domain Swiveling Revealed by the Crystal Structures of Complexes of E. coli Rep Helicase Bound to Single-Stranded DNA and ADP. Cell, 1997, 90, 635-647. | 13.5 | 493 |
| 7 | SSB as an Organizer/Mobilizer of Genome Maintenance Complexes. Critical Reviews in Biochemistry and Molecular Biology, 2008, 43, 289-318. | 2.3 | 487 |
| 8 | Initiation and re-initiation of DNA unwinding by the Escherichia coli Rep helicase. Nature, 2002, 419, 638-641. | 13.7 | 444 |
| 9 | Structure of the DNA binding domain of E. coli SSB bound to ssDNA. Nature Structural Biology, 2000, 7, 648-652. | 9.7 | 416 |
| 10 | Non-hexameric DNA helicases and translocases: mechanisms and regulation. Nature Reviews Molecular Cell Biology, 2008, 9, 391-401. | 16.1 | 317 |
| 11 | Interpretation of monovalent and divalent cation effects on the lac repressor-operator interaction. Biochemistry, 1977, 16, 4791-4796. | 1.2 | 265 |
| 12 | Repetitive shuttling of a motor protein on DNA. Nature, 2005, 437, 1321-1325. | 13.7 | 254 |
| 13 | SSB protein diffusion on single-stranded DNA stimulates RecA filament formation. Nature, 2009, 461, 1092-1097. | 13.7 | 251 |
| 14 | Large-scale overproduction and rapid purification of the Escherichia coli ssb gene product. Expression of the ssb gene under .lambda. PL control. Biochemistry, 1986, 25, 21-25. | 1.2 | 238 |
| 15 | Pentalysine-deoxyribonucleic acid interactions: a model for the general effects of ion concentrations on the interactions of proteins with nucleic acids. Biochemistry, 1980, 19, 3522-3530. | 1.2 | 217 |
| 16 | Escherichia coli single-strand binding protein forms multiple, distinct complexes with single-stranded DNA. Biochemistry, 1986, 25, 7799-7802. | 1.2 | 196 |
| 17 | A Dimer of Escherichia coli UvrD is the Active Form of the Helicase In Vitro. Journal of Molecular Biology, 2003, 325, 913-935. | 2.0 | 194 |
| 18 | Mechanism of ATP-dependent Translocation of E.coli UvrD Monomers Along Single-stranded DNA. Journal of Molecular Biology, 2004, 344, 1287-1309. | 2.0 | 187 |

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| 19 | Salt-dependent changes in the DNA binding co-operativity of Escherichia coli single strand binding protein. Journal of Molecular Biology, 1986, 187, 603-615. | 2.0 | 183 |
| 20 | SSB Functions as a Sliding Platform that Migrates on DNA via Reptation. Cell, 2011, 146, 222-232. | 13.5 | 180 |
| 21 | Kinetics of Protein-Nucleic Acid Interactions: Use of Salt Effects to Probe Mechanisms of Interactio. Critical Reviews in Biochemistry, 1986, 19, 191-245. | 7.5 | 179 |
| 22 | 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. Biochemistry, 1988, 27, 456-471. | 1.2 | 167 |
| 23 | Direct observation of structure-function relationship in a nucleic acidâ€“processing enzyme. Science, 2015, 348, 352-354. | 6.0 | 161 |
| 24 | 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. Journal of Molecular Biology, 2004, 336, 395-408. | 2.0 | 159 |
| 25 | PcrA Helicase Dismantles RecA Filaments by Reeling in DNA in Uniform Steps. Cell, 2010, 142, 544-555. | 13.5 | 156 |
| 26 | Srs2 Disassembles Rad51 Filaments by a Protein-Protein Interaction Triggering ATP Turnover and Dissociation of Rad51 from DNA. Molecular Cell, 2009, 35, 105-115. | 4.5 | 140 |
| 27 | The C-terminal domain of full-lengthE. coliSSB is disordered even when bound to DNA. Protein Science, 2004, 13, 1942-1947. | 3.1 | 139 |
| 28 | Dynamic Structural Rearrangements Between DNA Binding Modes of E. coli SSB Protein. Journal of Molecular Biology, 2007, 369, 1244-1257. | 2.0 | 137 |
| 29 | E. coli Rep oligomers are required to initiate DNA unwinding in vitro. Journal of Molecular Biology, 2001, 310, 327-350. | 2.0 | 135 |
| 30 | General Methods for Analysis of Sequential â€œn-stepâ€•Kinetic Mechanisms: Application to Single Turnover Kinetics of Helicase-Catalyzed DNA Unwinding. Biophysical Journal, 2003, 85, 2224-2239. | 0.2 | 131 |
| 31 | Autoinhibition of Escherichia coli Rep monomer helicase activity by its 2B subdomain. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 10076-10081. | 3.3 | 126 |
| 32 | Na+ effects on transitions of DNA and polynucleotides of variable linear charge density. Biopolymers, 1976, 15, 893-915. | 1.2 | 124 |
| 33 | [24] Thermodynamics of ligand-nucleic acid interactions. Methods in Enzymology, 1992, 212, 400-424. | 0.4 | 124 |
| 34 | Diffusion of Human Replication Protein A along Single-Stranded DNA. Journal of Molecular Biology, 2014, 426, 3246-3261. | 2.0 | 120 |
| 35 | 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. Biochemistry, 1987, 26, 3099-3106. | 1.2 | 118 |
| 36 | Escherichia coli Rep helicase unwinds DNA by an active mechanism. Biochemistry, 1993, 32, 6815-6820. | 1.2 | 115 |

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| 37 | Single-Molecule Views of Protein Movement on Single-Stranded DNA. Annual Review of Biophysics, 2012, 41, 295-319. | 4.5 | 114 |
| 38 | [15] Thermodynamic methods for model-independent determination of equilibrium binding isotherms for protein-DNA interactions: Spectroscopic approaches to monitor binding. Methods in Enzymology, 1991, 208, 258-290. | 0.4 | 113 |
| 39 | A Nonuniform Stepping Mechanism for E. coli UvrD Monomer Translocation along Single-Stranded DNA. Molecular Cell, 2007, 26, 335-347. | 4.5 | 112 |
| 40 | Bacillus stearothermophilus PcrA Monomer Is a Single-stranded DNA Translocase but Not a Processive Helicase in Vitro. Journal of Biological Chemistry, 2007, 282, 27076-27085. | 1.6 | 110 |
| 41 | Single-turnover kinetics of helicase-catalyzed DNA unwinding monitored continuously by fluorescence energy transfer. Biochemistry, 1994, 33, 14306-14316. | 1.2 | 105 |
| 42 | Comparisons between the structures of HCV and Rep helicases reveal structural similarities between SF1 and SF2 superâ€families of helicases. Protein Science, 1998, 7, 605-610. | 3.1 | 105 |
| 43 | A semiempirical extension of polyelectrolyte theory to the treatment of oligoelectrolytes: Application to oligonucleotide helix-coil transitions. Biopolymers, 1978, 17, 159-166. | 1.2 | 103 |
| 44 | An oligomeric form of E. coli UvrD is required for optimal helicase activity 1 1Edited by D. E. Draper. Journal of Molecular Biology, 1999, 293, 815-834. | 2.0 | 103 |
| 45 | Co-operative Binding of Escherichia coli SSB Tetramers to Single-stranded DNA in the (SSB)35 Binding Mode. Journal of Molecular Biology, 1994, 236, 106-123. | 2.0 | 101 |
| 46 | Thermodynamics of Charged Oligopeptide-Heparin Interactions. Biochemistry, 1995, 34, 2908-2915. | 1.2 | 97 |
| 47 | DNA-induced dimerization of the Escherichia coli Rep helicase. Journal of Molecular Biology, 1991, 221, 1165-1181. | 2.0 | 96 |
| 48 | Dynamics of E. coli single stranded DNA binding (SSB) protein-DNA complexes. Seminars in Cell and Developmental Biology, 2019, 86, 102-111. | 2.3 | 94 |
| 49 | Calorimetric studies of E. coli SSB protein-single-stranded DNA interactions. Effects of monovalent salts on binding enthalpy 1 1Edited by D. Draper. Journal of Molecular Biology, 1998, 278, 999-1014. | 2.0 | 91 |
| 50 | Analysis of ion concentration effects on the kinetics of protein-nucleic acid interactions. Biophysical Chemistry, 1978, 8, 281-294. | 1.5 | 90 |
| 51 | Stopped-Flow Studies of the Kinetics of Single-Stranded DNA Binding and Wrapping around theEscherichia coliSSB Tetramerâ€. Biochemistry, 2002, 41, 6032-6044. | 1.2 | 90 |
| 52 | Intrinsically Disordered C-Terminal Tails of E. coli Single-Stranded DNA Binding Protein Regulate Cooperative Binding to Single-Stranded DNA. Journal of Molecular Biology, 2015, 427, 763-774. | 2.0 | 90 |
| 53 | Apparent Heat Capacity Change Accompanying a Nonspecific Protein-DNA Interaction. Escherichia coli SSB Tetramer Binding to Oligodeoxyadenylates. Biochemistry, 1994, 33, 12896-12910. | 1.2 | 89 |
| 54 | A Highly Salt-Dependent Enthalpy Change for Escherichia coli SSB Proteinâ^'Nucleic Acid Binding Due to Ionâ^'Protein Interactions. Biochemistry, 1996, 35, 5272-5279. | 1.2 | 89 |

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| 55 | Overexpression, purification, DNA binding, and dimerization of the Escherichia coli uvrD gene product (Helicase II). Biochemistry, 1993, 32, 602-612. | 1.2 | 88 |
| 56 | Direct imaging of single UvrD helicase dynamics on long single-stranded DNA. Nature Communications, 2013, 4, 1878. | 5.8 | 88 |
| 57 | DNA Unwinding Step-size of E.coli RecBCD Helicase Determined from Single Turnover Chemical Quenched-flow Kinetic Studies. Journal of Molecular Biology, 2002, 324, 409-428. | 2.0 | 87 |
| 58 | Kinetic Mechanism of Direct Transfer ofEscherichia coliSSB Tetramers between Single-Stranded DNA Moleculesâ€. Biochemistry, 2002, 41, 11611-11627. | 1.2 | 86 |
| 59 | Srs2 prevents Rad51 filament formation by repetitive motion on DNA. Nature Communications, 2013, 4, 2281. | 5.8 | 86 |
| 60 | Regulation of Single-stranded DNA Binding by the C Termini of Escherichia coli Single-stranded DNA-binding (SSB) Protein. Journal of Biological Chemistry, 2010, 285, 17246-17252. | 1.6 | 83 |
| 61 | Limited co-operativity in protein-nucleic acid interactions. Journal of Molecular Biology, 1987, 195, 897-907. | 2.0 | 78 |
| 62 | Structural dynamics of E. coli single-stranded DNA binding protein reveal DNA wrapping and unwrapping pathways. ELife, 2015, 4, . | 2.8 | 78 |
| 63 | Negative co-operativity in Escherichia coli single strand binding protein-oligonucleotide interactions. Journal of Molecular Biology, 1989, 207, 269-288. | 2.0 | 77 |
| 64 | Saccharomyces cerevisiaeReplication Protein A Binds to Single-Stranded DNA in Multiple Salt-Dependent Modesâ€. Biochemistry, 2006, 45, 11958-11973. | 1.2 | 77 |
| 65 | Adenine Base Unstacking Dominates the Observed Enthalpy and Heat Capacity Changes for the Escherichia coli SSB Tetramer Binding to Single-Stranded Oligoadenylates. Biochemistry, 1999, 38, 7388-7397. | 1.2 | 76 |
| 66 | Fluorescence Stopped-flow Studies of Single Turnover Kinetics of E.coli RecBCD Helicase-catalyzed DNA Unwinding. Journal of Molecular Biology, 2004, 339, 731-750. | 2.0 | 76 |
| 67 | 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. Biochemistry, 1988, 27, 2260-2265. | 1.2 | 74 |
| 68 | On the cooperative binding of large ligands to a one-dimensional homogeneous lattice: The generalized three-state lattice model. Biopolymers, 1989, 28, 1637-1643. | 1.2 | 73 |
| 69 | Negative co-operativity in Escherichia coli single strand binding protein-oligonucleotide interactions. Journal of Molecular Biology, 1989, 207, 249-268. | 2.0 | 73 |
| 70 | Binding Specificity of Escherichia coli Single-Stranded DNA Binding Protein for the Ï‡ Subunit of DNA pol III Holoenzyme and PriA Helicase. Biochemistry, 2010, 49, 3555-3566. | 1.2 | 73 |
| 71 | Defining Single Molecular Forces Required for Notch Activation Using Nano Yoyo. Nano Letters, 2016, 16, 3892-3897. | 4.5 | 73 |
| 72 | Staying on Track: Common Features of DNA Helicases and Microtubule Motors. Cell, 1998, 93, 9-12. | 13.5 | 71 |

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| 73 | Kinetics and mechanism of the association of the bacteriophage T4 gene 32 (helix destabilizing) protein with single-stranded nucleic acids. Journal of Molecular Biology, 1981, 152, 67-109. | 2.0 | 69 |
| 74 | ATP-dependent Translocation of Proteins along Single-stranded DNA: Models and Methods of Analysis of Pre-steady State Kinetics. Journal of Molecular Biology, 2004, 344, 1265-1286. | 2.0 | 67 |
| 75 | Microsecond Dynamics of Proteinâ€"DNA Interactions: Direct Observation of the Wrapping/Unwrapping Kinetics of Single-stranded DNA around the E.coli SSB Tetramer. Journal of Molecular Biology, 2006, 359, 55-65. | 2.0 | 67 |
| 76 | [25] Nonspecific ligand-DNA equilibrium binding parameters determined by fluorescence methods. Methods in Enzymology, 1992, 212, 424-458. | 0.4 | 65 |
| 77 | Multiple C-Terminal Tails within a Single E. coli SSB Homotetramer Coordinate DNA Replication and Repair. Journal of Molecular Biology, 2013, 425, 4802-4819. | 2.0 | 65 |
| 78 | Linkage of pH, Anion and Cation Effects in Protein-Nucleic Acid Equilibria. Journal of Molecular Biology, 1994, 236, 165-178. | 2.0 | 63 |
| 79 | The 2B domain of the Escherichia coli Rep protein is not required for DNA helicase activity. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 16006-16011. | 3.3 | 63 |
| 80 | Active displacement of RecA filaments by UvrD translocase activity. Nucleic Acids Research, 2015, 43, 4133-4149. | 6.5 | 58 |
| 81 | Rotations of the 2B Sub-domain of E. coli UvrD Helicase/Translocase Coupled to Nucleotide and DNA Binding. Journal of Molecular Biology, 2011, 411, 633-648. | 2.0 | 57 |
| 82 | Ultrafast Redistribution of E. coli SSB along Long Single-Stranded DNA via Intersegment Transfer. Journal of Molecular Biology, 2014, 426, 2413-2421. | 2.0 | 57 |
| 83 | Kinetic Mechanism of DNA Binding and DNA-Induced Dimerization of theEscherichia coliRep Helicaseâ€. Biochemistry, 1996, 35, 2268-2282. | 1.2 | 55 |
| 84 | Large contributions of coupled protonation equilibria to the observed enthalpy and heat capacity changes for ssDNA binding toEscherichia coli SSB protein. Proteins: Structure, Function and Bioinformatics, 2000, 41, 8-22. | 1.5 | 52 |
| 85 | Kinetic Mechanism for Formation of the Active, Dimeric UvrD Helicase-DNA Complex. Journal of Biological Chemistry, 2003, 278, 31930-31940. | 1.6 | 50 |
| 86 | Self-association Equilibria of Escherichia coli UvrD Helicase Studied by Analytical Ultracentrifugation. Journal of Molecular Biology, 2003, 325, 889-912. | 2.0 | 49 |
| 87 | Escherichia coli RecBC helicase has two translocase activities controlled by a single ATPase motor. Nature Structural and Molecular Biology, 2010, 17, 1210-1217. | 3.6 | 49 |
| 88 | Glutamate promotes SSB proteinâ€"protein Interactions via intrinsically disordered regions. Journal of Molecular Biology, 2017, 429, 2790-2801. | 2.0 | 46 |
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| 90 | Effects of Temperature and ATP on the Kinetic Mechanism and Kinetic Step-size for E.coli RecBCD Helicase-catalyzed DNA Unwinding. Journal of Molecular Biology, 2004, 339, 751-771. | 2.0 | 45 |

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| 92 | 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. Biochemistry, 1984, 23, 4656-4665. | 1.2 | 42 |
| 93 | ATPase Activity ofEscherichia coliRep Helicase Is Dramatically Dependent on DNA Ligation and Protein Oligomeric Statesâ€. Biochemistry, 1996, 35, 5726-5734. | 1.2 | 41 |
| 94 | 5â€²-Single-stranded/duplex DNA junctions are loading sites for E. coli UvrD translocase. EMBO Journal, 2010, 29, 3826-3839. | 3.5 | 41 |
| 95 | Large domain movements upon UvrD dimerization and helicase activation. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 12178-12183. | 3.3 | 41 |
| 96 | Energetics of DNA End Binding by E.coli RecBC and RecBCD Helicases Indicate Loop Formation in the 3â€²-Single-stranded DNA Tail. Journal of Molecular Biology, 2005, 352, 765-782. | 2.0 | 38 |
| 97 | SSBâ€“DNA Binding Monitored by Fluorescence Intensity and Anisotropy. Methods in Molecular Biology, 2012, 922, 55-83. | 0.4 | 38 |
| 98 | Plasmodium falciparum SSB Tetramer Wraps Single-Stranded DNA with Similar Topology but Opposite Polarity to E. coli SSB. Journal of Molecular Biology, 2012, 420, 269-283. | 2.0 | 36 |
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| 100 | Effects of Monovalent Anions on a Temperature-Dependent Heat Capacity Change forEscherichia coliSSB Tetramer Binding to Single-Stranded DNAâ€. Biochemistry, 2006, 45, 5190-5205. | 1.2 | 34 |
| 101 | A novel chlorophyll protein complex in the repair cycle of photosystem II. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 21907-21913. | 3.3 | 34 |
| 102 | ATP Hydrolysis Stimulates Binding and Release of Single Stranded DNA from Alternating Subunits of the DimericE. coliRep Helicase: Implications for ATP-driven Helicase Translocation. Journal of Molecular Biology, 1996, 263, 411-422. | 2.0 | 33 |
| 103 | Protein Environment and DNA Orientation Affect Protein-Induced Cy3 Fluorescence Enhancement. Biophysical Journal, 2019, 117, 66-73. | 0.2 | 31 |
| 104 | UvrD helicase activation by MutL involves rotation of its 2B subdomain. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 16320-16325. | 3.3 | 31 |
| 105 | Structural Mechanisms of Cooperative DNA Binding by Bacterial Single-Stranded DNA-Binding Proteins. Journal of Molecular Biology, 2019, 431, 178-195. | 2.0 | 31 |
| 106 | Binding of the Dimeric Deinococcus radiodurans Single-Stranded DNA Binding Protein to Single-Stranded DNA. Biochemistry, 2010, 49, 8266-8275. | 1.2 | 30 |
| 107 | Single-Stranded DNA Translocation of E. coli UvrD Monomer Is Tightly Coupled to ATP Hydrolysis. Journal of Molecular Biology, 2012, 418, 32-46. | 2.0 | 30 |
| 108 | Ensemble methods for monitoring enzyme translocation along single stranded nucleic acids. Methods, 2010, 51, 269-276. | 1.9 | 29 |

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| 109 | Cooperative binding of polyamines induces the Escherichia coli single-strand binding protein-DNA binding mode transitions. Biochemistry, 1992, 31, 6166-6174. | 1.2 | 27 |
| 110 | Effects of Base Composition on the Negative Cooperativity and Binding Mode Transitions of Escherichia coli SSB-Single-Stranded DNA Complexes. Biochemistry, 1994, 33, 6167-6176. | 1.2 | 27 |
| 111 | A Two-Site Mechanism for ATP Hydrolysis by the Asymmetric Rep Dimer P2S As Revealed by Site-Specific Inhibition with ADPâ˜'AlF4â€. Biochemistry, 1997, 36, 3115-3125. | 1.2 | 27 |
| 112 | Influence of DNA End Structure on the Mechanism of Initiation of DNA Unwinding by the Escherichia coli RecBCD and RecBC Helicases. Journal of Molecular Biology, 2008, 382, 312-326. | 2.0 | 26 |
| 113 | Are the intrinsically disordered linkers involved in SSB binding to accessory proteins?. Nucleic Acids Research, 2019, 47, 8581-8594. | 6.5 | 26 |
| 114 | Plasmodium falciparum SSB Tetramer Binds Single-Stranded DNA Only in a Fully Wrapped Mode. Journal of Molecular Biology, 2012, 420, 284-295. | 2.0 | 25 |
| 115 | How Glutamate Promotes Liquid-liquid Phase Separation and DNA Binding Cooperativity of E. coli SSB Protein. Journal of Molecular Biology, 2022, 434, 167562. | 2.0 | 25 |
| 116 | Asymmetric Regulation of Bipolar Single-stranded DNA Translocation by the Two Motors within Escherichia coli RecBCD Helicase. Journal of Biological Chemistry, 2013, 288, 1055-1064. | 1.6 | 24 |
| 117 | How Does a Helicase Unwind DNA? Insights from RecBCD Helicase. BioEssays, 2018, 40, e1800009. | 1.2 | 24 |
| 118 | Regulation of Rep helicase unwinding by an auto-inhibitory subdomain. Nucleic Acids Research, 2019, 47, 2523-2532. | 6.5 | 24 |
| 119 | A mutation in E. coli SSB protein (W54S) alters intra-tetramer negative cooperativity and inter-tetramer positive cooperativity for single-stranded DNA binding. Biophysical Chemistry, 1997, 64, 235-251. | 1.5 | 23 |
| 120 | Regulation of Nearest-Neighbor Cooperative Binding of E.Âcoli SSB Protein to DNA. Biophysical Journal, 2019, 117, 2120-2140. | 0.2 | 23 |
| 121 | Model for the irreversible dissociation kinetics of cooperatively bound protein-nucleic acid complexes. Biopolymers, 1983, 22, 1697-1713. | 1.2 | 22 |
| 122 | Probing 3â€²-ssDNA Loop Formation in E. coli RecBCD/RecBCâ€“DNA Complexes Using Non-natural DNA: A Model for â€œChiâ€•Recognition Complexes. Journal of Molecular Biology, 2006, 362, 26-43. | 2.0 | 22 |
| 123 | Regulation of UvrD Helicase Activity by MutL. Journal of Molecular Biology, 2018, 430, 4260-4274. | 2.0 | 22 |
| 124 | Kinetics of Escherichia coli helicase II-catalyzed unwinding of fully duplex and nicked circular DNA. Biochemistry, 1993, 32, 4128-4138. | 1.2 | 21 |
| 125 | Fluorescence Methods to Study DNA Translocation and Unwinding Kinetics by Nucleic Acid Motors. Methods in Molecular Biology, 2012, 875, 85-104. | 0.4 | 19 |
| 126 | The Primary and Secondary Translocase Activities within E. coli RecBC Helicase Are Tightly Coupled to ATP Hydrolysis by the RecB Motor. Journal of Molecular Biology, 2012, 423, 303-314. | 2.0 | 19 |

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| 127 | Interactions of the E. coli Single Strand Binding (SSB) protein with ss nucleic acids. Binding mode transitions and equilibrium binding studies. Biochemical Pharmacology, 1988, 37, 1781-1782. | 2.0 | 17 |
| 128 | Kinetic Mechanism for the Sequential Binding of Two Single-Stranded Oligodeoxynucleotides to theEscherichia coliRep Helicase Dimerâ€. Biochemistry, 1998, 37, 891-899. | 1.2 | 17 |
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| 130 | Kinetic Control of Mg2+-dependent Melting of Duplex DNA Ends by Escherichia coli RecBC. Journal of Molecular Biology, 2008, 378, 761-777. | 2.0 | 15 |
| 131 | Kinetics of Motor Protein Translocation on Single-Stranded DNA. Methods in Molecular Biology, 2009, 587, 45-56. | 0.4 | 14 |
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| 133 | Regulation of E. coli Rep helicase activity by PriC. Journal of Molecular Biology, 2021, 433, 167072. | 2.0 | 13 |
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| 135 | SSB Binding to ssDNA Using Isothermal Titration Calorimetry. Methods in Molecular Biology, 2012, 922, 37-54. | 0.4 | 12 |
| 136 | Allosteric effects of SSB C-terminal tail on assembly of E. coli RecOR proteins. Nucleic Acids Research, 2021, 49, 1987-2004. | 6.5 | 12 |
| 137 | Self-Assembly ofEscherichia coliMutL and Its Complexes with DNA. Biochemistry, 2011, 50, 7868-7880. | 1.2 | 11 |
| 138 | Single-Molecule Nanopositioning: Structural Transitions of a Helicase-DNA Complex during ATP Hydrolysis. Biophysical Journal, 2011, 101, 976-984. | 0.2 | 11 |
| 139 | Is a fully wrapped SSBâ€“DNA complex essential forEscherichia colisurvival?. Nucleic Acids Research, 2016, 44, 4317-4329. | 6.5 | 11 |
| 140 | E. coli SSB tetramer binds the first and second molecules of (dT)35 with heat capacities of opposite sign. Biophysical Chemistry, 2011, 159, 48-57. | 1.5 | 10 |
| 141 | Modulation of Escherichia coli UvrD Single-Stranded DNA Translocation by DNA Base Composition. Biophysical Journal, 2017, 113, 1405-1415. | 0.2 | 10 |
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| 143 | Kinetic and structural mechanism for DNA unwinding by a non-hexameric helicase. Nature Communications, 2021, 12, 7015. | 5.8 | 10 |
| 144 | Heterogeneity in E. coli RecBCD Helicase-DNA Binding and Base Pair Melting. Journal of Molecular Biology, 2021, 433, 167147. | 2.0 | 9 |

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| 145 | Mycobacterium tuberculosis DNA repair helicase UvrD1 is activated by redox-dependent dimerization via a 2B domain cysteine. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, . | 3.3 | 9 |
| 146 | Clipping Along. Journal of Molecular Biology, 2010, 399, 663-664. | 2.0 | 2 |
| 147 | Probing E.Âcoli SSB protein-DNA topology by reversing DNA backbone polarity. Biophysical Journal, 2021, 120, 1522-1533. | 0.2 | 1 |
| 148 | DNA Helicases: Dimeric Enzyme Action. , 2004, , 618-623. | | 1 |
| 149 | Replication \| Nonhexameric SF1 DNA Helicases/Translocases. , 2021, , 98-103. | | 0 |