

Peter H Von Hippel

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176 papers	22,192 citations	68 h-index	148 g-index
181 ext. papers	23,105 ext. citations	7.9 avg, IF	6.65 L-index

#	Paper	IF	Citations
176	Calculation of protein extinction coefficients from amino acid sequence data. <i>Analytical Biochemistry</i> , 1989 , 182, 319-26	3.1	5029
175	Theoretical aspects of DNA-protein interactions: co-operative and non-co-operative binding of large ligands to a one-dimensional homogeneous lattice. <i>Journal of Molecular Biology</i> , 1974 , 86, 469-89	6.5	2609
174	Diffusion-driven mechanisms of protein translocation on nucleic acids. 1. Models and theory. <i>Biochemistry</i> , 1981 , 20, 6929-48	3.2	1014
173	Protein-nucleic acid interactions in transcription: a molecular analysis. <i>Annual Review of Biochemistry</i> , 1984 , 53, 389-446	29.1	610
172	Diffusion-controlled macromolecular interactions. <i>Annual Review of Biophysics and Biophysical Chemistry</i> , 1985 , 14, 131-60		609
171	Selection of DNA binding sites by regulatory proteins. Statistical-mechanical theory and application to operators and promoters. <i>Journal of Molecular Biology</i> , 1987 , 193, 723-50	6.5	554
170	Diffusion-driven mechanisms of protein translocation on nucleic acids. 3. The Escherichia coli lac repressor--operator interaction: kinetic measurements and conclusions. <i>Biochemistry</i> , 1981 , 20, 6961-77	3.2	514
169	Ion effects on the solution structure of biological macromolecules. <i>Accounts of Chemical Research</i> , 1969 , 2, 257-265	24.3	469
168	Interactions of bacteriophage T4-coded gene 32 protein with nucleic acids. I. Characterization of the binding interactions. <i>Journal of Molecular Biology</i> , 1981 , 145, 75-104	6.5	310
167	Diffusion-driven mechanisms of protein translocation on nucleic acids. 2. The Escherichia coli repressor--operator interaction: equilibrium measurements. <i>Biochemistry</i> , 1981 , 20, 6948-60	3.2	269
166	Casein and the Stabilization of Casein Micelles. <i>Journal of the American Chemical Society</i> , 1956 , 78, 4576-4582	14.1	267
165	Selection of DNA binding sites by regulatory proteins. II. The binding specificity of cyclic AMP receptor protein to recognition sites. <i>Journal of Molecular Biology</i> , 1988 , 200, 709-23	6.5	264
164	Action at a distance: DNA-looping and initiation of transcription. <i>Trends in Biochemical Sciences</i> , 1995 , 20, 500-6	10.3	255
163	DNA-protein interactions. <i>Annual Review of Biochemistry</i> , 1972 , 41, 231-300	29.1	252
162	Betaine can eliminate the base pair composition dependence of DNA melting. <i>Biochemistry</i> , 1993 , 32, 137-44	3.2	245
161	Model nucleoprotein complexes: studies on the interaction of cationic homopolypeptides with DNA. <i>Journal of Molecular Biology</i> , 1967 , 24, 157-76	6.5	241
160	The structure of collagen and gelatin. <i>Advances in Protein Chemistry</i> , 1961 , 16, 1-138		204

159	Formaldehyde as a probe of DNA structure. I. Reaction with exocyclic amino groups of DNA bases. <i>Biochemistry</i> , 1975 , 14, 1281-96	3.2	182
158	A thermodynamic analysis of RNA transcript elongation and termination in <i>Escherichia coli</i> . <i>Biochemistry</i> , 1991 , 30, 1097-118	3.2	179
157	Cooperative and noncooperative binding of protein ligands to nucleic acid lattices: experimental approaches to the determination of thermodynamic parameters. <i>Biochemistry</i> , 1986 , 25, 1226-40	3.2	177
156	Effects of methylation on the stability of nucleic acid conformations: studies at the monomer level. <i>Biochemistry</i> , 1974 , 13, 4143-58	3.2	174
155	A general model for nucleic acid helicases and their "coupling" within macromolecular machines. <i>Cell</i> , 2001 , 104, 177-90	56.2	167
154	Kinetics of protein-nucleic acid interactions: use of salt effects to probe mechanisms of interaction. <i>Critical Reviews in Biochemistry</i> , 1986 , 19, 191-245		159
153	Interactions of bacteriophage T4-coded gene 32 protein with nucleic acids. II. Specificity of binding to DNA and RNA. <i>Journal of Molecular Biology</i> , 1981 , 145, 105-21	6.5	151
152	From "simple" DNA-protein interactions to the macromolecular machines of gene expression. <i>Annual Review of Biophysics and Biomolecular Structure</i> , 2007 , 36, 79-105		146
151	Direct measurement of association constants for the binding of <i>Escherichia coli</i> lac repressor to non-operator DNA. <i>Biochemistry</i> , 1977 , 16, 4769-76	3.2	145
150	Transcriptional activation via DNA-looping: visualization of intermediates in the activation pathway of <i>E. coli</i> RNA polymerase σ 54 holoenzyme by scanning force microscopy. <i>Journal of Molecular Biology</i> , 1997 , 270, 125-38	6.5	138
149	The role of DNA structure in genetic regulation. <i>CRC Critical Reviews in Biochemistry</i> , 1977 , 4, 305-40		137
148	Helicase mechanisms and the coupling of helicases within macromolecular machines. Part I: Structures and properties of isolated helicases. <i>Quarterly Reviews of Biophysics</i> , 2002 , 35, 431-78	7	132
147	Thinking quantitatively about transcriptional regulation. <i>Nature Reviews Molecular Cell Biology</i> , 2005 , 6, 221-32	48.7	131
146	Model studies on the effects of neutral salts on the conformational stability of biological macromolecules. I. Ion binding to polyacrylamide and polystyrene columns. <i>Biochemistry</i> , 1973 , 12, 1256-64	3.2	129
145	<i>Escherichia coli</i> sigma 70 and NusA proteins. I. Binding interactions with core RNA polymerase in solution and within the transcription complex. <i>Journal of Molecular Biology</i> , 1991 , 220, 307-24	6.5	120
144	Casein: Monomers and Polymers ¹ . <i>Journal of the American Chemical Society</i> , 1955 , 77, 4311-4319	16.4	120
143	How do genome-regulatory proteins locate their DNA target sites?. <i>Trends in Biochemical Sciences</i> , 1982 , 7, 52-55	10.3	117
142	Helicase mechanisms and the coupling of helicases within macromolecular machines. Part II: Integration of helicases into cellular processes. <i>Quarterly Reviews of Biophysics</i> , 2003 , 36, 1-69	7	115

141	Formaldehyde as a probe of DNA structure. r. Mechanism of the initial reaction of Formaldehyde with DNA. <i>Biochemistry</i> , 1977 , 16, 3276-93	3.2	114
140	The phage T4-coded DNA replication helicase (gp41) forms a hexamer upon activation by nucleoside triphosphate. <i>Journal of Biological Chemistry</i> , 1995 , 270, 7462-73	5.4	111
139	On the structure and stability of DNA-protamine and DNA-polypeptide complexes. <i>Journal of Molecular Biology</i> , 1968 , 33, 265-81	6.5	106
138	Structure and function of the bacteriophage T4 DNA polymerase holoenzyme. <i>Biochemistry</i> , 1992 , 31, 8675-90	3.2	105
137	The effect of ions on the kinetics of formation and the stability of the collagenfold. <i>Biochemistry</i> , 1962 , 1, 664-74	3.2	104
136	The protein factors MBNL1 and U2AF65 bind alternative RNA structures to regulate splicing. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 9203-8	11.5	103
135	Equilibrium and kinetic studies of Escherichia coli lac repressor-inducer interactions. <i>Journal of Molecular Biology</i> , 1972 , 66, 143-55	6.5	101
134	THE COLLAGEN GELATIN PHASE TRANSITION. I. FURTHER STUDIES OF THE EFFECTS OF SOLVENT ENVIRONMENT AND POLYPEPTIDE CHAIN COMPOSITION. <i>Biochemistry</i> , 1963 , 2, 1387-98	3.2	101
133	Structure and assembly of the Escherichia coli transcription termination factor rho and its interaction with RNA. I. Cryoelectron microscopic studies. <i>Journal of Molecular Biology</i> , 1991 , 221, 1127-38	6.5	100
132	Physical chemical studies of the structure and function of DNA binding (helix-destabilizing) proteins. <i>Critical Reviews in Biochemistry</i> , 1980 , 7, 247-89		100
131	The single-nucleotide addition cycle in transcription: a biophysical and biochemical perspective. <i>Annual Review of Biophysics and Biomolecular Structure</i> , 1992 , 21, 379-415		99
130	Interactions of Escherichia coli transcription termination factor rho with RNA. I. Binding stoichiometries and free energies. <i>Journal of Molecular Biology</i> , 1988 , 199, 609-22	6.5	99
129	RNA sequence and secondary structure requirements for rho-dependent transcription termination. <i>Nucleic Acids Research</i> , 1985 , 13, 3739-54	20.1	99
128	Nucleic acid binding properties of Escherichia coli ribosomal protein S1. I. Structure and interactions of binding site I. <i>Journal of Molecular Biology</i> , 1978 , 122, 321-38	6.5	99
127	Selection of DNA binding sites by regulatory proteins. <i>Trends in Biochemical Sciences</i> , 1988 , 13, 207-11	10.3	98
126	Autoregulation of gene expression. Quantitative evaluation of the expression and function of the bacteriophage T4 gene 32 (single-stranded DNA binding) protein system. <i>Journal of Molecular Biology</i> , 1982 , 162, 795-818	6.5	98
125	Formaldehyde as a probe of DNA structure. II. Reaction with endocyclic imino groups of DNA bases. <i>Biochemistry</i> , 1975 , 14, 1297-303	3.2	95
124	MICROCOCCAL NUCLEASE AS A PROBE OF DNA CONFORMATION. <i>Biochemistry</i> , 1964 , 3, 27-39	3.2	93

123	On the determination of deoxyribonucleic acid-protein interaction parameters using the nitrocellulose filter-binding assay. <i>Biochemistry</i> , 1983 , 22, 4730-7	3.2	92
122	Interactions of bacteriophage T4-coded gene 32 protein with nucleic acids. III. Binding properties of two specific proteolytic digestion products of the protein (G32P*I and G32P*III). <i>Journal of Molecular Biology</i> , 1981 , 145, 123-38	6.5	90
121	Formation and stabilization of the collagen-fold. <i>Archives of Biochemistry and Biophysics</i> , 1961 , 92, 100-113	3.1	89
120	Interactions of Escherichia coli transcription termination factor rho with RNA. II. Electron microscopy and nuclease protection experiments. <i>Journal of Molecular Biology</i> , 1988 , 199, 623-35	6.5	88
119	Hydrogen exchange as a probe of the dynamic structure of DNA. I. General acid-base catalysis. <i>Journal of Molecular Biology</i> , 1970 , 50, 297-316	6.5	84
118	Dynamic aspects of native DNA structure: kinetics of the formaldehyde reaction with calf thymus DNA. <i>Journal of Molecular Biology</i> , 1971 , 61, 587-613	6.5	84
117	Physical properties of the Escherichia coli transcription termination factor rho. 1. Association states and geometry of the rho hexamer. <i>Biochemistry</i> , 1992 , 31, 111-21	3.2	77
116	Kinetic parameters of the translocation of bacteriophage T4 gene 41 protein helicase on single-stranded DNA. <i>Journal of Molecular Biology</i> , 1994 , 235, 1447-58	6.5	76
115	The elongation-termination decision in transcription. <i>Science</i> , 1992 , 255, 809-12	33.3	76
114	Formaldehyde as a probe of DNA structure. 3. Equilibrium denaturation of DNA and synthetic polynucleotides. <i>Biochemistry</i> , 1977 , 16, 3267-76	3.2	76
113	Enzymic studies of the gelatin to collagen-fold transition. <i>Biochimica Et Biophysica Acta</i> , 1959 , 36, 427-47		75
112	Fifty years of DNA "breathing": Reflections on old and new approaches. <i>Biopolymers</i> , 2013 , 99, 923-54	2.2	72
111	Regulation of rho-dependent transcription termination by NusG is specific to the Escherichia coli elongation complex. <i>Biochemistry</i> , 2000 , 39, 5573-85	3.2	72
110	Molecular mechanisms of the functional coupling of the helicase (gp41) and polymerase (gp43) of bacteriophage T4 within the DNA replication fork. <i>Biochemistry</i> , 2001 , 40, 4459-77	3.2	71
109	Laser cross-linking of protein-nucleic acid complexes. <i>Methods in Enzymology</i> , 1991 , 208, 211-36	1.7	71
108	21 Single-Stranded DNA Binding Proteins. <i>The Enzymes</i> , 1981 , 373-444	2.3	68
107	Model studies on the effects of neutral salts on the conformational stability of biological macromolecules. II. Effects of vicinal hydrophobic groups on the specificity of binding of ions to amide groups. <i>Biochemistry</i> , 1973 , 12, 1264-71	3.2	68
106	Cryoelectron microscopic visualization of functional subassemblies of the bacteriophage T4 DNA replication complex. <i>Journal of Molecular Biology</i> , 1992 , 224, 395-412	6.5	67

105	Complexes of N antitermination protein of phage lambda with specific and nonspecific RNA target sites on the nascent transcript. <i>Biochemistry</i> , 1997 , 36, 1514-24	3.2	66
104	The conformation dependent hydrolysis of DNA by micrococcal nuclease. <i>Nucleic Acids and Protein Synthesis</i> , 1968 , 157, 114-26		66
103	Spectroscopic studies of position-specific DNA "breathing" fluctuations at replication forks and primer-template junctions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 4231-6	11.5	65
102	Single-molecule FRET and linear dichroism studies of DNA breathing and helicase binding at replication fork junctions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 17320-5	11.5	62
101	Kinetic theory of ATP-driven translocases on one-dimensional polymer lattices. <i>Journal of Molecular Biology</i> , 1994 , 235, 1436-46	6.5	60
100	Physical properties of the Escherichia coli transcription termination factor rho. 2. Quaternary structure of the rho hexamer. <i>Biochemistry</i> , 1992 , 31, 121-32	3.2	60
99	Functional interactions of ligand cofactors with Escherichia coli transcription termination factor rho. I. Binding of ATP. <i>Protein Science</i> , 1992 , 1, 850-60	6.3	56
98	Native collagen has a two-banded structure. <i>Journal of Molecular Biology</i> , 1974 , 83, 1-16	6.5	56
97	A multilaboratory comparison of calibration accuracy and the performance of external references in analytical ultracentrifugation. <i>PLoS ONE</i> , 2015 , 10, e0126420	3.7	55
96	Assembly of an RNA-protein complex. Binding of NusB and NusE (S10) proteins to boxA RNA nucleates the formation of the antitermination complex involved in controlling rRNA transcription in Escherichia coli. <i>Journal of Biological Chemistry</i> , 2005 , 280, 36397-408	5.4	54
95	THE COLLAGEN GELATIN PHASE TRANSITION. II. SHAPE OF THE MELTING CURVES AND EFFECT OF CHAIN LENGTH. <i>Biochemistry</i> , 1963 , 2, 1399-413	3.2	54
94	RNA displacement pathways during transcription from synthetic RNA-DNA bubble duplexes. <i>Biochemistry</i> , 1994 , 33, 340-7	3.2	53
93	Direct observation of UV-crosslinked protein-nucleic acid complexes by matrix-assisted laser desorption ionization mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 1993 , 7, 496-501	2.2	53
92	Low-energy circular dichroism of 2-aminopurine dinucleotide as a probe of local conformation of DNA and RNA. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004 , 101, 3426-31	11.5	52
91	Stability of Escherichia coli transcription complexes near an intrinsic terminator. <i>Journal of Molecular Biology</i> , 1994 , 244, 36-51	6.5	52
90	Hydrogen exchange as a probe of the dynamic structure of DNA. II. Effects of base composition and destabilizing salts. <i>Journal of Molecular Biology</i> , 1970 , 50, 317-32	6.5	51
89	Regulation of the elongation-termination decision at intrinsic terminators by antitermination protein N of phage lambda. <i>Journal of Molecular Biology</i> , 1997 , 273, 797-813	6.5	50
88	Kinetics of the RNA-DNA helicase activity of Escherichia coli transcription termination factor rho. 2. Processivity, ATP consumption, and RNA binding. <i>Biochemistry</i> , 1997 , 36, 7993-8004	3.2	46

87	Biochemistry. Completing the view of transcriptional regulation. <i>Science</i> , 2004 , 305, 350-2	33.3	46
86	Specific ion effects on the solution conformation of poly-L-proline. <i>Biopolymers</i> , 1969 , 7, 861-877	2.2	46
85	Solution conformation of 2-aminopurine (2-AP) dinucleotide determined by ultraviolet 2D fluorescence spectroscopy (UV-2D FS). <i>New Journal of Physics</i> , 2013 , 15,	2.9	44
84	On the processivity of DNA replication. <i>Journal of Biomolecular Structure and Dynamics</i> , 1983 , 1, 715-27	3.6	43
83	Structural analyses of gp45 sliding clamp interactions during assembly of the bacteriophage T4 DNA polymerase holoenzyme. I. Conformational changes within the gp44/62-gp45-ATP complex during clamp loading. <i>Journal of Biological Chemistry</i> , 1997 , 272, 31666-76	5.4	41
82	Functional interactions of ligand cofactors with Escherichia coli transcription termination factor rho. II. Binding of RNA. <i>Protein Science</i> , 1992 , 1, 861-73	6.3	41
81	On the molecular weight of myosin. <i>Biochimica Et Biophysica Acta</i> , 1958 , 28, 504-7		41
80	The ATP-activated hexameric helicase of bacteriophage T4 (gp41) forms a stable primosome with a single subunit of T4-coded primase (gp61). <i>Journal of Biological Chemistry</i> , 1996 , 271, 19625-31	5.4	37
79	Dissection of the ATP-driven reaction cycle of the bacteriophage T4 DNA replication processivity clamp loading system. <i>Journal of Molecular Biology</i> , 2001 , 309, 869-91	6.5	36
78	The kinetic mechanism of formation of the bacteriophage T4 DNA polymerase sliding clamp. <i>Journal of Molecular Biology</i> , 1996 , 264, 440-52	6.5	36
77	Proteolytic enzymes as probes of the secondary structure of fibrous proteins. <i>Biochimica Et Biophysica Acta</i> , 1959 , 32, 303-4		35
76	Internally labeled Cy3/Cy5 DNA constructs show greatly enhanced photo-stability in single-molecule FRET experiments. <i>Nucleic Acids Research</i> , 2014 , 42, 5967-77	20.1	34
75	Kinetics of the RNA-DNA helicase activity of Escherichia coli transcription termination factor rho. 1. Characterization and analysis of the reaction. <i>Biochemistry</i> , 1997 , 36, 7980-92	3.2	34
74	Assembly of the N-dependent antitermination complex of phage lambda: NusA and RNA bind independently to different unfolded domains of the N protein. <i>Journal of Molecular Biology</i> , 1997 , 274, 160-73	6.5	33
73	Structural analyses of gp45 sliding clamp interactions during assembly of the bacteriophage T4 DNA polymerase holoenzyme. II. The Gp44/62 clamp loader interacts with a single defined face of the sliding clamp ring. <i>Journal of Biological Chemistry</i> , 1997 , 272, 31677-84	5.4	31
72	Fluorescence monitoring of T4 polymerase holoenzyme accessory protein interactions during loading of the sliding clamp onto the template-primer junction. <i>Journal of Molecular Biology</i> , 1996 , 264, 426-39	6.5	31
71	Structural analyses of gp45 sliding clamp interactions during assembly of the bacteriophage T4 DNA polymerase holoenzyme. III. The Gp43 DNA polymerase binds to the same face of the sliding clamp as the clamp loader. <i>Journal of Biological Chemistry</i> , 1997 , 272, 31685-92	5.4	30
70	Specificity mechanisms in the control of transcription. <i>Biophysical Chemistry</i> , 1996 , 59, 231-46	3.5	30

69	Nucleic acid binding properties of Escherichia coli ribosomal protein S1. II. Co-operativity and specificity of binding site II. <i>Journal of Molecular Biology</i> , 1978 , 122, 339-59	6.5	30
68	Breathing fluctuations in position-specific DNA base pairs are involved in regulating helicase movement into the replication fork. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 14428-33	11.5	29
67	Macromolecular complexes that unwind nucleic acids. <i>BioEssays</i> , 2003 , 25, 1168-77	4.1	29
66	Interactions of bacteriophage T4-coded primase (gp61) with the T4 replication helicase (gp41) and DNA in primosome formation. <i>Journal of Biological Chemistry</i> , 1999 , 274, 27287-98	5.4	29
65	Determinants of the stability of transcription elongation complexes: interactions of the nascent RNA with the DNA template and the RNA polymerase. <i>Journal of Molecular Biology</i> , 1999 , 289, 1179-94	6.5	29
64	DNA conformational changes at the primer-template junction regulate the fidelity of replication by DNA polymerase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 17980-5	11.5	27
63	Model studies on the effects of neutral salts on the conformational stability of biological macromolecules. 3. Solubility of fatty acid amides in ionic solutions. <i>Biochemistry</i> , 1973 , 12, 1271-8	3.2	27
62	Characterization of the 6-methyl isoxanthopterin (6-MI) base analog dimer, a spectroscopic probe for monitoring guanine base conformations at specific sites in nucleic acids. <i>Nucleic Acids Research</i> , 2012 , 40, 1191-202	20.1	26
61	Rho-dependent termination within the trp t ^Q terminator. I. Effects of rho loading and template sequence. <i>Biochemistry</i> , 1998 , 37, 11202-14	3.2	26
60	Monitoring RNA transcription in real time by using surface plasmon resonance. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 3315-20	11.5	25
59	Direct spectroscopic study of reconstituted transcription complexes reveals that intrinsic termination is driven primarily by thermodynamic destabilization of the nucleic acid framework. <i>Journal of Biological Chemistry</i> , 2008 , 283, 3537-3549	5.4	25
58	Reaction pathways in transcript elongation. <i>Biophysical Chemistry</i> , 2002 , 101-102, 401-23	3.5	25
57	A boundary sedimentation velocity method for determining nonspecific nucleic acid-protein interaction binding parameters. <i>Analytical Biochemistry</i> , 1977 , 80, 267-81	3.1	25
56	Mapping the conformation of the nucleic acid framework of the T7 RNA polymerase elongation complex in solution using low-energy CD and fluorescence spectroscopy. <i>Journal of Molecular Biology</i> , 2006 , 360, 800-13	6.5	24
55	Investigating local conformations of double-stranded DNA by low-energy circular dichroism of pyrrolo-cytosine. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005 , 102, 7169-73	11.5	24
54	Structure and assembly of the Escherichia coli transcription termination factor rho and its interactions with RNA. II. Physical chemical studies. <i>Journal of Molecular Biology</i> , 1991 , 221, 1139-51	6.5	23
53	A single-molecule view of the assembly pathway, subunit stoichiometry, and unwinding activity of the bacteriophage T4 primosome (helicase-primase) complex. <i>Biochemistry</i> , 2013 , 52, 3157-70	3.2	22
52	Rho-dependent termination within the trp t ^Q terminator. II. Effects of kinetic competition and rho processivity. <i>Biochemistry</i> , 1998 , 37, 11215-22	3.2	20

51	Multiple ATP binding is required to stabilize the "activated" (clamp open) clamp loader of the T4 DNA replication complex. <i>Journal of Biological Chemistry</i> , 2008 , 283, 28338-53	5.4	20
50	Low energy CD of RNA hairpin unveils a loop conformation required for lambdaN antitermination activity. <i>Journal of Biological Chemistry</i> , 2005 , 280, 32177-83	5.4	20
49	Local conformations and competitive binding affinities of single- and double-stranded primer-template DNA at the polymerization and editing active sites of DNA polymerases. <i>Journal of Biological Chemistry</i> , 2009 , 284, 17180-17193	5.4	19
48	Function and assembly of the bacteriophage T4 DNA replication complex: interactions of the T4 polymerase with various model DNA constructs. <i>Journal of Biological Chemistry</i> , 2003 , 278, 25435-47	5.4	19
47	Components of multiprotein-RNA complex that controls transcription elongation in Escherichia coli phage lambda. <i>Methods in Enzymology</i> , 1996 , 274, 374-402	1.7	19
46	Thermodynamic analysis of the transcription cycle in E. coli. <i>Biophysical Chemistry</i> , 1990 , 37, 239-50	3.5	19
45	Hydrogen-exchange studies of deoxyribonucleic acid-protein complexes. Development of a filtration method and application to the deoxyribonucleic acid-polylysine system. <i>Biochemistry</i> , 1968 , 7, 2480-8	3.2	19
44	DNA models of trinucleotide frameshift deletions: the formation of loops and bulges at the primer-template junction. <i>Nucleic Acids Research</i> , 2009 , 37, 1682-9	20.1	18
43	Using macromolecular crowding agents to identify weak interactions within DNA replication complexes. <i>Methods in Enzymology</i> , 1995 , 262, 466-76	1.7	17
42	Escherichia coli sigma 70 and NusA proteins. II. Physical properties and self-association states. <i>Journal of Molecular Biology</i> , 1991 , 220, 325-33	6.5	17
41	Active Escherichia coli transcription elongation complexes are functionally homogeneous. <i>Journal of Molecular Biology</i> , 2002 , 322, 505-19	6.5	16
40	Mapping the interactions of the single-stranded DNA binding protein of bacteriophage T4 (gp32) with DNA lattices at single nucleotide resolution: gp32 monomer binding. <i>Nucleic Acids Research</i> , 2015 , 43, 9276-90	20.1	15
39	Effects of reaction conditions on RNA secondary structure and on the helicase activity of Escherichia coli transcription termination factor Rho. <i>Journal of Molecular Biology</i> , 1998 , 279, 713-26	6.5	15
38	Ion-induced water-proton chemical shifts and the conformational stability of macromolecules. <i>Biochemistry</i> , 1970 , 9, 1059-66	3.2	15
37	Measuring local conformations and conformational disorder of (Cy3) dimer labeled DNA fork junctions using absorbance, circular dichroism and two-dimensional fluorescence spectroscopy. <i>Faraday Discussions</i> , 2019 , 216, 211-235	3.6	14
36	Assembly and subunit stoichiometry of the functional helicase-primase (primosome) complex of bacteriophage T4. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 13596-601	11.5	13
35	Proton exchange of N-methylacetamide in concentrated aqueous electrolyte solutions. I. Acid catalysis. <i>Journal of the American Chemical Society</i> , 1968 , 90, 5954-5960	16.4	13
34	Conformational aspects of the nucleic acid-protein recognition problem. <i>Journal of Cellular Physiology</i> , 1969 , 74, Suppl 1:235-8	7	13

33	Using microsecond single-molecule FRET to determine the assembly pathways of T4 ssDNA binding protein onto model DNA replication forks. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, E3612-E3621	11.5	11
32	Mechanistic studies of the T4 DNA (gp41) replication helicase: functional interactions of the C-terminal Tails of the helicase subunits with the T4 (gp59) helicase loader protein. <i>Journal of Molecular Biology</i> , 2005 , 347, 257-75	6.5	11
31	Model studies on the effects of neutral salts on the conformational stability of biological macromolecules. IV. Properties of fatty acid amide micelles. <i>Biochemistry</i> , 1973 , 12, 1278-82	3.2	10
30	Development of a "modular" scheme to describe the kinetics of transcript elongation by RNA polymerase. <i>Biophysical Journal</i> , 2011 , 101, 1155-65	2.9	9
29	Using Multiorder Time-Correlation Functions (TCFs) To Elucidate Biomolecular Reaction Pathways from Microsecond Single-Molecule Fluorescence Experiments. <i>Journal of Physical Chemistry B</i> , 2016 , 120, 13003-13016	3.4	9
28	Mapping the interactions of the single-stranded DNA binding protein of bacteriophage T4 (gp32) with DNA lattices at single nucleotide resolution: polynucleotide binding and cooperativity. <i>Nucleic Acids Research</i> , 2015 , 43, 9291-305	20.1	8
27	Electronic transition moments of 6-methyl isoxanthopterin--a fluorescent analogue of the nucleic acid base guanine. <i>Nucleic Acids Research</i> , 2013 , 41, 995-1004	20.1	8
26	The antitermination activity of bacteriophage lambda N protein is controlled by the kinetics of an RNA-looping-facilitated interaction with the transcription complex. <i>Journal of Molecular Biology</i> , 2008 , 384, 87-108	6.5	8
25	Quantitative dissection of transcriptional control system: N-dependent antitermination complex of phage lambda as regulatory paradigm. <i>Methods in Enzymology</i> , 2000 , 323, 1-31	1.7	8
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