Michael A Trakselis

List of Publications by Year
in descending order

62 papers	1,938 citations	304743 22 h-index	265206 42 g-index
115 all docs	115 docs citations	115 times ranked	2105 citing authors

#	Article	IF	Citations
1	Determining translocation orientations of nucleic acid helicases. Methods, 2022, 204, 160-171.	3.8	1
2	In vivoÂfluorescent TUNEL detection of single stranded DNA gaps and breaks induced byÂdnaBÂhelicase mutants inÂEscherichia coli. Methods in Enzymology, 2022, , 125-142.	1.0	2
3	Tau Mediated Coupling Interactions between Pol III Core DNA Synthesis and DnaB Helicase Unwinding. FASEB Journal, 2022, 36, .	0.5	0
4	Motifs of the C-terminal domain of MCM9 direct localization to sites of mitomycin-C damage for RAD51 recruitment. Journal of Biological Chemistry, 2021, 296, 100355.	3.4	14
5	Molecular Contacts and Kinetic Control within the Replisome maintain Coupled DNA Unwinding and Synthesis. FASEB Journal, 2021, 35, .	0.5	0
6	A Unifying Framework for Understanding Biological Structures and Functions Across Levels of Biological Organization. Integrative and Comparative Biology, 2021, , .	2.0	1
7	Division of Chemical Toxicology Program at the American Chemical Society National Meeting: Celebrating 25 Years!. Chemical Research in Toxicology, 2021, 34, 2167-2168.	3.3	0
8	Targeted chromosomal Escherichia coli:dnaB exterior surface residues regulate DNA helicase behavior to maintain genomic stability and organismal fitness. PLoS Genetics, 2021, 17, e1009886.	3.5	3
9	Beyond the Lesion: Back to High Fidelity DNA Synthesis. Frontiers in Molecular Biosciences, 2021, 8, 811540.	3.5	3
10	A hand-off of DNA between archaeal polymerases allows high-fidelity replication to resume at a discrete intermediate three bases past 8-oxoguanine. Nucleic Acids Research, 2020, 48, 10986-10997.	14.5	6
11	Site-specific DNA Mapping of Protein Binding Orientation Using Azidophenacyl Bromide (APB). Bio-protocol, 2020, 10, e3649.	0.4	1
12	Contacts and context that regulate DNA helicase unwinding and replisome progression. The Enzymes, 2019, 45, 183-223.	1.7	15
13	Fine-tuning of the replisome: Mcm10 regulates fork progression and regression. Cell Cycle, 2019, 18, 1047-1055.	2.6	6
14	The MCM8/9 complex: A recent recruit to the roster of helicases involved in genome maintenance. DNA Repair, 2019, 76, 1-10.	2.8	40
15	Amidst multiple binding orientations on fork DNA, Saccharolobus MCM helicase proceeds N-first for unwinding. ELife, 2019, 8, .	6.0	7
16	Control of Hexamerization, Assembly, and Excluded Strand Specificity for the <i>Sulfolobus solfataricus</i> MCM Helicase. Biochemistry, 2018, 57, 5672-5682.	2.5	4
17	Synthetic polymers as substrates for a DNAâ€sliding clamp protein. Biopolymers, 2018, 109, e23119.	2.4	2
18	Multisubunit Multiactive Site DNA Polymerase Complexes with Coordinated Activities. FASEB Journal, 2018, 32, 646.1.	0.5	0

#	Article	IF	Citations
19	Mechanistic insights into how CMG helicase facilitates replication past DNA roadblocks. DNA Repair, 2017, 55, 76-82.	2.8	15
20	Bacterial DnaB helicase interacts with the excluded strand to regulate unwinding. Journal of Biological Chemistry, 2017, 292, 19001-19012.	3.4	15
21	Characterization of a coupled DNA replication and translesion synthesis polymerase supraholoenzyme from archaea. Nucleic Acids Research, 2017, 45, 8329-8340.	14.5	13
22	Coordination and Substitution of DNA Polymerases in Response to Genomic Obstacles. Chemical Research in Toxicology, 2017, 30, 1956-1971.	3.3	9
23	Biochemical Characterization of the Human Mitochondrial Replicative Twinkle Helicase. Journal of Biological Chemistry, 2016, 291, 14324-14339.	3.4	17
24	The excluded DNA strand is SEW important for hexameric helicase unwinding. Methods, 2016, 108, 79-91.	3.8	12
25	DNA Interactions Probed by Hydrogen-Deuterium Exchange (HDX) Fourier Transform Ion Cyclotron Resonance Mass Spectrometry Confirm External Binding Sites on the Minichromosomal Maintenance (MCM) Helicase. Journal of Biological Chemistry, 2016, 291, 12467-12480.	3.4	18
26	Structural Mechanisms of Hexameric Helicase Loading, Assembly, and Unwinding. F1000Research, 2016, 5, 111.	1.6	23
27	Crystal Structure of a Transcribing RNA Polymerase II Complex Reveals a Complete Transcription Bubble. Molecular Cell, 2015, 59, 258-269.	9.7	98
28	Exome sequencing reveals MCM8 mutation underlies ovarian failure and chromosomal instability. Journal of Clinical Investigation, 2015, 125, 258-262.	8.2	178
29	MCM9 Mutations Are Associated with Ovarian Failure, Short Stature, and Chromosomal Instability. American Journal of Human Genetics, 2014, 95, 754-762.	6.2	172
30	Introduction to Nucleic Acid Polymerases: Families, Themes, and Mechanisms. Nucleic Acids and Molecular Biology, 2014, , 1-15.	0.2	3
31	Archaeal DNA Polymerases: Enzymatic Abilities, Coordination, and Unique Properties. Nucleic Acids and Molecular Biology, 2014, , 139-162.	0.2	1
32	Novel Interaction of the Bacterial-Like DnaG Primase with the MCM Helicase in Archaea. Journal of Molecular Biology, 2013, 425, 1259-1273.	4.2	11
33	Assembly and Distributive Action of an Archaeal DNA Polymerase Holoenzyme. Journal of Molecular Biology, 2013, 425, 4820-4836.	4.2	19
34	Identification, quantification, and evolutionary analysis of a novel isoform of MCM9. Gene, 2013, 519, 41-49.	2.2	8
35	A clamp-like biohybrid catalyst for DNA oxidation. Nature Chemistry, 2013, 5, 945-951.	13.6	64
36	Structure of a Highly Conserved Domain of Rock1 Required for Shroom-Mediated Regulation of Cell Morphology. PLoS ONE, 2013, 8, e81075.	2.5	16

#	Article	IF	Citations
37	Structure of Shroom domain 2 reveals a three-segmented coiled-coil required for dimerization, Rock binding, and apical constriction. Molecular Biology of the Cell, 2012, 23, 2131-2142.	2.1	30
38	Molecular hurdles cleared with ease. Nature, 2012, 492, 195-197.	27.8	2
39	Kinetics and Fidelity of Polymerization by DNA Polymerase III from <i>Sulfolobus solfataricus</i>. Biochemistry, 2012, 51, 1996-2007.	2.5	21
40	Differential Temperature-Dependent Multimeric Assemblies of Replication and Repair Polymerases on DNA Increase Processivity. Biochemistry, 2012, 51, 7367-7382.	2.5	17
41	Strand Annealing and Terminal Transferase Activities of a B-family DNA Polymerase. Biochemistry, 2011, 50, 5379-5390.	2.5	8
42	Steric exclusion and wrapping of the excluded DNA strand occurs along discrete external binding paths during MCM helicase unwinding. Nucleic Acids Research, 2011, 39, 6585-6595.	14.5	65
43	An Archaeal Bâ€family DNA Polymerase Exists as a Trimer with Additional Annealing and Terminal Transferase Activities. FASEB Journal, 2011, 25, 880.10.	0.5	0
44	Characterization of a Functional DnaG-Type Primase in Archaea: Implications for a Dual-Primase System. Journal of Molecular Biology, 2010, 397, 664-676.	4.2	20
45	A trimeric DNA polymerase complex increases the native replication processivity. Nucleic Acids Research, 2009, 37, 7194-7205.	14.5	19
46	MCM Forked Substrate Specificity Involves Dynamic Interaction with the 5â€²-Tail. Journal of Biological Chemistry, 2007, 282, 34229-34234.	3.4	83
47	Organization of the archaeal MCM complex on DNA and implications for the helicase mechanism. Nature Structural and Molecular Biology, 2005, 12, 756-762.	8.2	160
48	Architecture of the bacteriophage T4 primosome: Electron microscopy studies of helicase (gp41) and primase (gp61). Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 3623-3626.	7.1	32
49	Assembly of the bacteriophage T4 primosome: Single-molecule and ensemble studies. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 3254-3259.	7.1	42
50	Identification and Mapping of Proteinâ^'Protein Interactions by a Combination of Cross-Linking, Cleavage, and Proteomics. Bioconjugate Chemistry, 2005, 16, 741-750.	3.6	109
51	From The Cover: The dynamic processivity of the T4 DNA polymerase during replication. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 8289-8294.	7.1	125
52	'Screw-cap' clamp loader proteins that thread. Nature Structural and Molecular Biology, 2004, 11, 580-581.	8.2	3
53	The loader of the rings. Nature, 2004, 429, 708-709.	27.8	6
54	On the Solution Structure of the T4 Sliding Clamp (gp45). Biochemistry, 2004, 43, 12723-12727.	2.5	42

#	Article	IF	Citations
55	Examination of the Role of the Clamp-loader and ATP Hydrolysis in the Formation of the Bacteriophage T4 Polymerase Holoenzyme. Journal of Molecular Biology, 2003, 326, 435-451.	4.2	46
56	The Application of a Minicircle Substrate in the Study of the Coordinated T4 DNA Replication. Journal of Biological Chemistry, 2003, 278, 49828-49838.	3.4	27
57	Dissociative Properties of the Proteins within the Bacteriophage T4 Replisome. Journal of Biological Chemistry, 2003, 278, 49839-49849.	3.4	23
58	Protein-Protein Interactions in the Bacteriophage T4 Replisome. Journal of Biological Chemistry, 2003, 278, 3145-3152.	3.4	44
59	Dynamic protein interactions in the bacteriophage T4 replisome. Trends in Biochemical Sciences, 2001, 26, 566-572.	7.5	29
60	Intricacies in ATP-Dependent Clamp Loading. Structure, 2001, 9, 999-1004.	3.3	51
61	Creating a dynamic picture of the sliding clamp during T4 DNA polymerase holoenzyme assembly by using fluorescence resonance energy transfer. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 8368-8375.	7.1	110
62	Building a Replisome Solution Structure by Elucidation of Protein-Protein Interactions in the Bacteriophage T4 DNA Polymerase Holoenzyme. Journal of Biological Chemistry, 2001, 276, 39340-39349.	3.4	27