Michael O'Donnell

List of Publications by Year
in descending order

36 papers	2,468 citations	201575 27 h-index	360920 35 g-index
46 all docs	46 docs citations	46 times ranked	2085 citing authors

#	Article	IF	Citations
1	CMG helicase can use ATPÎ³S to unwind DNA: Implications for the rate-limiting step in the reaction mechanism. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2119580119.	3.3	8
2	DNA is loaded through the 9-1-1 DNA checkpoint clamp in the opposite direction of the PCNA clamp. Nature Structural and Molecular Biology, 2022, 29, 376-385.	3.6	19
3	Water skating: How polymerase sliding clamps move on DNA. FEBS Journal, 2021, 288, 7256-7262.	2.2	8
4	The DNA Replication Machine: Structure and Dynamic Function. Sub-Cellular Biochemistry, 2021, 96, 233-258.	1.0	18
5	Tunability of DNA Polymerase Stability during Eukaryotic DNA Replication. Molecular Cell, 2020, 77, 17-25.e5.	4.5	71
6	Replisome bypass of a protein-based R-loop block by Pif1. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 30354-30361.	3.3	35
7	Structure of eukaryotic DNA polymerase Î´ bound to the PCNA clamp while encircling DNA. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 30344-30353.	3.3	41
8	Structure of the polymerase Îµ holoenzyme and atomic model of the leading strand replisome. Nature Communications, 2020, 11, 3156.	5.8	57
9	DNA unwinding mechanism of a eukaryotic replicative CMG helicase. Nature Communications, 2020, 11, 688.	5.8	50
10	Replication Fork Activation Is Enabled by a Single-Stranded DNA Gate in CMG Helicase. Cell, 2019, 178, 600-611.e16.	13.5	109
11	Nuclease dead Cas9 is a programmable roadblock for DNA replication. Scientific Reports, 2019, 9, 13292.	1.6	45
12	Mcm10 has potent strand-annealing activity and limits translocase-mediated fork regression. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 798-803.	3.3	35
13	An explanation for origin unwinding in eukaryotes. ELife, 2019, 8, .	2.8	23
14	Ctf4 organizes sister replisomes and Pol Î± into a replication factory. ELife, 2019, 8, .	2.8	42
15	Getting ready for DNA duplication. ELife, 2019, 8, .	2.8	3
16	The ring-shaped hexameric helicases that function at DNA replication forks. Nature Structural and Molecular Biology, 2018, 25, 122-130.	3.6	78
17	Structure of eukaryotic CMG helicase at a replication fork and implications to replisome architecture and origin initiation. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E697-E706.	3.3	176
18	Quality control mechanisms exclude incorrect polymerases from the eukaryotic replication fork. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 675-680.	3.3	50

#	Article	IF	Citations
19	Single-molecule visualization of Saccharomyces cerevisiae leading-strand synthesis reveals dynamic interaction between MTC and the replisome. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 10630-10635.	3.3	57
20	In vitro Assays for Eukaryotic Leading/Lagging Strand DNA Replication. Bio-protocol, 2017, 7, .	0.2	10
21	Action of CMG with strand-specific DNA blocks supports an internal unwinding mode for the eukaryotic replicative helicase. ELife, 2017, 6, .	2.8	47
22	Mcm10 promotes rapid isomerization of CMG-DNA for replisome bypass of lagging strand DNA blocks. ELife, 2017, 6, .	2.8	79
23	A proposal: Evolution of PCNA's role as a marker of newly replicated DNA. DNA Repair, 2015, 29, 4-15.	1.3	43
24	A structural role for the PHP domain in E. coli DNA polymerase III. BMC Structural Biology, 2013, 13, 8.	2.3	40
25	Principles and Concepts of DNA Replication in Bacteria, Archaea, and Eukarya. Cold Spring Harbor Perspectives in Biology, 2013, 5, a010108-a010108.	2.3	262
26	How a DNA Polymerase Clamp Loader Opens a Sliding Clamp. Science, 2011, 334, 1675-1680.	6.0	155
27	What happens when replication and transcription complexes collide?. Cell Cycle, 2010, 9, 2537-2543.	1.3	67
28	Polymerase trafficking. Transcription, 2010, 1, 136-139.	1.7	3
29	Direct Restart of a Replication Fork Stalled by a Head-On RNA Polymerase. Science, 2010, 327, 590-592.	6.0	147
30	Temporal Correlation of DNA Binding, ATP Hydrolysis, and Clamp Release in the Clamp Loading Reaction Catalyzed by the Escherichia coli Î³ complex. Biochemistry, 2009, 48, 8516-8527.	1.2	34
31	The replisome uses mRNA as a primer after colliding with RNA polymerase. Nature, 2008, 456, 762-766.	13.7	174
32	Proteomic and genomic characterization of chromatin complexes at a boundary. Journal of Cell Biology, 2005, 169, 35-47.	2.3	130
33	A Sliding-Clamp Toolbelt Binds High- and Low-Fidelity DNA Polymerases Simultaneously. Molecular Cell, 2005, 19, 805-815.	4.5	181
34	DNA polymerase clamp loaders and DNA recognition. FEBS Letters, 2005, 579, 863-867.	1.3	68
35	Overproduction and analysis of eukaryotic multiprotein complexes in Escherichia coli using a dual-vector strategy. Analytical Biochemistry, 2003, 319, 78-87.	1.1	76
36	Cryo-EM structures reveal that RFC recognizes both the 3â€²- and 5â€²-DNA ends to load PCNA onto gaps for DNA repair. ELife, 0, 11, .	2.8	13