Miguel de Vega

List of Publications by Year
in descending order

54	1,319	489802 18	406436 35
papers	citations	h-index	g-index

54	54	54	996
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Small-molecule activation of OGG1 increases oxidative DNA damage repair by gaining a new function. Science, 2022, 376, 1471-1476.	6.0	20
2	Structural Determinants Responsible for the Preferential Insertion of Ribonucleotides by Bacterial NHEJ PolDom. Biomolecules, 2020, 10, 203.	1.8	2
3	An array of basic residues is essential for the nucleolytic activity of the PHP domain of bacterial/archaeal PolX DNA polymerases. Scientific Reports, 2019, 9, 9947.	1.6	4
4	The Loop of the TPR1 Subdomain of Phi29 DNA Polymerase Plays a Pivotal Role in Primer-Terminus Stabilization at the Polymerization Active Site. Biomolecules, 2019, 9, 648.	1.8	1
5	New insights into the coordination between the polymerization and 3â€²-5â€² exonuclease activities in Ï•29 DNA polymerase. Scientific Reports, 2019, 9, 923.	1.6	6
6	Bacterial Ligase D preternary-precatalytic complex performs efficient abasic sites processing at double strand breaks during nonhomologous end joining. Nucleic Acids Research, 2019, 47, 5276-5292.	6.5	1
7	Noncatalytic aspartate at the exonuclease domain of proofreading DNA polymerases regulates both degradative and synthetic activities. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E2921-E2929.	3.3	7
8	The anti / syn conformation of 8-oxo-7,8-dihydro-2â€²-deoxyguanosine is modulated by Bacillus subtilis PolX active site residues His255 and Asn263. Efficient processing of damaged 3â€²-ends. DNA Repair, 2017, 52, 59-69.	1.3	7
9	Phaeocystis globosa Virus DNA Polymerase X: a â€œSwiss Army knifeâ€ Multifunctional DNA polymerase-lyase-ligase for Base Excision Repair. Scientific Reports, 2017, 7, 6907.	1.6	5
10	DNA-Binding Proteins Essential for Protein-Primed Bacteriophage Î¦29 DNA Replication. Frontiers in Molecular Biosciences, 2016, 3, 37.	1.6	31
11	Protein-Primed Replication of Bacteriophage Î¦29 DNA. The Enzymes, 2016, 39, 137-167.	0.7	17
12	Identification of a conserved 5â€²-dRP lyase activity in bacterial DNA repair ligase D and its potential role in base excision repair. Nucleic Acids Research, 2016, 44, 1833-1844.	6.5	19
13	Improvement of Ï•29 DNA Polymerase Amplification Performance by Fusion of DNA Binding Motifs. , 2016, , 11-24.		1
14	Insights into the Determination of the Templating Nucleotide at the Initiation of Ï†29 DNA Replication. Journal of Biological Chemistry, 2015, 290, 27138-27145.	1.6	5
15	DNA polymerase from temperate phage Bam35 is endowed with processive polymerization and abasic sites translesion synthesis capacity. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E3476-84.	3.3	20
16	Efficient processing of abasic sites by bacterial nonhomologous end-joining Ku proteins. Nucleic Acids Research, 2014, 42, 13082-13095.	6.5	17
17	Role of the LEXE Motif of Protein-primed DNA Polymerases in the Interaction with the Incoming Nucleotide. Journal of Biological Chemistry, 2014, 289, 2888-2898.	1.6	6
18	Dual Role of Ï†29 DNA Polymerase Lys529 in Stabilisation of the DNA Priming-Terminus and the Terminal Protein-Priming Residue at the Polymerisation Site. PLoS ONE, 2013, 8, e72765.	1.1	5

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19	The Minimal Bacillus subtilis Nonhomologous End Joining Repair Machinery. PLoS ONE, 2013, 8, e64232.	1.1	27
20	Involvement of residues of the Ï•29 terminal protein intermediate and priming domains in the formation of a stable and functional heterodimer with the replicative DNA polymerase. Nucleic Acids Research, 2012, 40, 3886-3897.	6.5	9
21	DNA stabilization at the Bacillus subtilis PolX core â€"a binding model to coordinate polymerase, AP-endonuclease and 3â€²-5â€² exonuclease activities. Nucleic Acids Research, 2012, 40, 9750-9762.	6.5	5
22	The Essential Role of the 3â€² Terminal Template Base in the First Steps of Protein-Primed DNA Replication. PLoS ONE, 2012, 7, e48257.	1.1	0
23	Terminal protein-primed amplification of heterologous DNA with a minimal replication system based on phage Î¦29. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 18655-18660.	3.3	42
24	Improvement of Ï†29 DNA polymerase amplification performance by fusion of DNA binding motifs. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 16506-16511.	3.3	57
25	Intrinsic apurinic/apyrimidinic (AP) endonuclease activity enables Bacillus subtilis DNA polymerase X to recognize, incise, and further repair abasic sites. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 19219-19224.	3.3	17
26	Ï•29 DNA Polymerase Active Site: Role of Residue Val250 as Metalâ€"dNTP Complex Ligand and in Protein-Primed Initiation. Journal of Molecular Biology, 2010, 395, 223-233.	2.0	4
27	Involvement of the TPR2 subdomain movement in the activities of Â29 DNA polymerase. Nucleic Acids Research, 2009, 37, 193-203.	6.5	17
28	Functional Importance of Bacteriophage Ï•29 DNA Polymerase Residue Tyr148 in Primer-terminus Stabilisation at the 3â€²-5â€² Exonuclease Active Site. Journal of Molecular Biology, 2009, 391, 797-807.	2.0	5
29	The bacteriophage Ï•29 DNA polymerase. IUBMB Life, 2008, 60, 82-85.	1.5	21
30	Characterization of a Bacillus subtilis 64-kDa DNA Polymerase X Potentially Involved in DNA Repair. Journal of Molecular Biology, 2008, 384, 1019-1028.	2.0	21
31	Phage Ï†29 and Nf terminal protein-priming domain specifies the internal template nucleotide to initiate DNA replication. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 18290-18295.	3.3	11
32	Enzymatic synthesis of structure-free DNA with pseudo-complementary properties. Nucleic Acids Research, 2008, 36, 3409-3419.	6.5	21
33	Editing of misaligned 3'-termini by an intrinsic 3'-5' exonuclease activity residing in the PHP domain of a family X DNA polymerase. Nucleic Acids Research, 2008, 36, 5736-5749.	6.5	33
34	Involvement of phage Ï•29 DNA polymerase and terminal protein subdomains in conferring specificity during initiation of protein-primed DNA replication. Nucleic Acids Research, 2007, 35, 7061-7073.	6.5	17
35	A highly conserved Tyrosine residue of family B DNA polymerases contributes to dictate translesion synthesis past 8-oxo-7,8-dihydro-2â€²-deoxyguanosine. Nucleic Acids Research, 2007, 35, 5096-5107.	6.5	16
36	Structures of phi29 DNA polymerase complexed with substrate: the mechanism of translocation in B-family polymerases. EMBO Journal, 2007, 26, 3494-3505.	3.5	140

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37	Functional characterization of highly processive protein-primed DNA polymerases from phages Nf and GA-1, endowed with a potent strand displacement capacity. Nucleic Acids Research, 2006, 34, 6051-6063.	6.5	14
38	The Ï†29 DNA polymerase:protein-primer structure suggests a model for the initiation to elongation transition. EMBO Journal, 2006, 25, 1335-1343.	3.5	87
39	Involvement of Â29 DNA polymerase thumb subdomain in the proper coordination of synthesis and degradation during DNA replication. Nucleic Acids Research, 2006, 34, 3107-3115.	6.5	17
40	A specific subdomain in Â29 DNA polymerase confers both processivity and strand-displacement capacity. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 6407-6412.	3.3	86
41	Involvement of the â€œlinkerâ€•region between the exonuclease and polymerization domains of Ï•29 DNA polymerase in DNA and TP binding. Gene, 2005, 348, 89-99.	1.0	3
42	Insights into Strand Displacement and Processivity from the Crystal Structure of the Protein-Primed DNA Polymerase of Bacteriophage Ï†29. Molecular Cell, 2004, 16, 609-618.	4.5	157
43	Ï†29 DNA Polymeraseâ€“Terminal Protein Interaction. Involvement of Residues Specifically Conserved Among Protein-primed DNA Polymerases. Journal of Molecular Biology, 2004, 337, 829-841.	2.0	11
44	Ï†29 DNA Polymerase Residue Phe128 of the Highly Conserved (S/T)Lx2h Motif is Required for a Stable and Functional Interaction with the Terminal Protein. Journal of Molecular Biology, 2003, 325, 85-97.	2.0	4
45	A Conserved Insertion in Protein-primed DNA Polymerases is Involved in Primer Terminus Stabilisation. Journal of Molecular Biology, 2003, 331, 781-794.	2.0	18
46	Ï•29 DNA Polymerase Residue Leu384, Highly Conserved in Motif B of Eukaryotic Type DNA Replicases, Is Involved in Nucleotide Insertion Fidelity. Journal of Biological Chemistry, 2003, 278, 33482-33491.	1.6	4
47	Phi29 DNA polymerase residues Tyr59, His61 and Phe69 of the highly conserved ExoII motif are essential for interaction with the terminal protein. Nucleic Acids Research, 2002, 30, 1379-1386.	6.5	13
48	Phage Ã¸29 DNA polymerase residues involved in the proper stabilisation of the primer-terminus at the 3â€²-5â€² exonuclease active site 1 1Edited by J. Karn. Journal of Molecular Biology, 2000, 304, 1-9.	2.0	17
49	An aspartic acid residue in TPR-1, a specific region of protein-priming DNA polymerases, is required for the functional interaction with primer terminal protein. Journal of Molecular Biology, 2000, 304, 289-300.	2.0	54
50	Processive proofreading and the spatial relationship between polymerase and exonuclease active sites of bacteriophage Ã¸29 DNA polymerase 1 1Edited by J. Karn. Journal of Molecular Biology, 1999, 292, 39-51.	2.0	24
51	Mutational analysis of Ã¸29 DNA polymerase residues acting as ssDNA ligands for 3â€²-5â€² exonucleolysis. Journal of Molecular Biology, 1998, 279, 807-822.	2.0	43
52	Ã¸29 DNA Polymerase Residue Ser122, a Single-stranded DNA Ligand for 3â€²-5â€² Exonucleolysis, Is Required to Interact with the Terminal Protein. Journal of Biological Chemistry, 1998, 273, 28966-28977.	1.6	27
53	An invariant lysine residue is involved in catalysis at the 3â€²-5â€² exonuclease active site of eukaryotic-type DNA polymerases. Journal of Molecular Biology, 1997, 270, 65-78.	2.0	23
54	Terminal protein-primed DNA amplification.. Proceedings of the National Academy of Sciences of the United States of America, 1994, 91, 12198-12202.	3.3	80