Brandt F Eichman

List of Publications by Year
in descending order

#	Article	IF	Citations
1	SMARCAL1 catalyzes fork regression and Holliday junction migration to maintain genome stability during DNA replication. Genes and Development, 2012, 26, 151-162.	5.9	235
2	Structural basis for the dual coding potential of 8-oxoguanosine by a high-fidelity DNA polymerase. EMBO Journal, 2004, 23, 3452-3461.	7.8	200
3	HLTFâ€™s Ancient HIRAN Domain Binds 3â€² DNA Ends to Drive Replication Fork Reversal. Molecular Cell, 2015, 58, 1090-1100.	9.7	163
4	Recent advances in the structural mechanisms of DNA glycosylases. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2013, 1834, 247-271.	2.3	149
5	Substrate-Selective Repair and Restart of Replication Forks by DNA Translocases. Cell Reports, 2013, 3, 1958-1969.	6.4	136
6	HMCES Maintains Genome Integrity by Shielding Abasic Sites in Single-Strand DNA. Cell, 2019, 176, 144-153.e13.	28.9	127
7	HLTF Promotes Fork Reversal, Limiting Replication Stress Resistance and Preventing Multiple Mechanisms of Unrestrained DNA Synthesis. Molecular Cell, 2020, 78, 1237-1251.e7.	9.7	125
8	Extensive loss of cell-cycle and DNA repair genes in an ancient lineage of bipolar budding yeasts. PLoS Biology, 2019, 17, e3000255.	5.6	116
9	Data publication with the structural biology data grid supports live analysis. Nature Communications, 2016, 7, 10882.	12.8	113
10	Insights into eukaryotic DNA priming from the structure and functional interactions of the 4Fe-4S cluster domain of human DNA primase. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 13684-13689.	7.1	81
11	An unprecedented nucleic acid capture mechanism for excision of DNA damage. Nature, 2010, 468, 406-411.	27.8	69
12	Protection of abasic sites during DNA replication by a stable thiazolidine protein-DNA cross-link. Nature Structural and Molecular Biology, 2019, 26, 613-618.	8.2	69
13	Emerging Roles of DNA Glycosylases and the Base Excision Repair Pathway. Trends in Biochemical Sciences, 2019, 44, 765-781.	7.5	67
14	Domain structure of the DEMETER 5-methylcytosine DNA glycosylase. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 19225-19230.	7.1	66
15	Differential Stabilities and Sequence-Dependent Base Pair Opening Dynamics of Watsonâ€"Crick Base Pairs with 5-Hydroxymethylcytosine, 5-Formylcytosine, or 5-Carboxylcytosine. Biochemistry, 2015, 54, 1294-1305.	2.5	64
16	Physical Interactions between Mcm10, DNA, and DNA Polymerase Î±. Journal of Biological Chemistry, 2009, 284, 24662-24672.	3.4	55
17	The extended and eccentric E-DNA structure induced by cytosine methylation or bromination. Nature Structural Biology, 2000, 7, 758-761.	9.7	53
18	Structural Basis for DNA Binding by Replication Initiator Mcm10. Structure, 2008, 16, 1892-1901.	3.3	53

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19	The DNA glycosylase AlkD uses a non-base-flipping mechanism to excise bulky lesions. Nature, 2015, 527, 254-258.	27.8	52
20	Crystal structures of 3-methyladenine DNA glycosylase MagIII and the recognition of alkylated bases. EMBO Journal, 2003, 22, 4898-4909.	7.8	51
21	The crystal structures of DNA Holliday junctions. Current Opinion in Structural Biology, 2001, 11, 302-308.	5.7	49
22	The crystal structures of psoralen cross-linked DNAs: drug-dependent formation of Holliday junctions11Edited by I. Tinoco. Journal of Molecular Biology, 2001, 308, 15-26.	4.2	48
23	Domain Architecture and Biochemical Characterization of Vertebrate Mcm10. Journal of Biological Chemistry, 2008, 283, 3338-3348.	3.4	47
24	Nucleic acid recognition by tandem helical repeats. Current Opinion in Structural Biology, 2012, 22, 101-109.	5.7	46
25	The Inherent Properties of DNA Four-way Junctions: Comparing the Crystal Structures of Holliday Junctions. Journal of Molecular Biology, 2002, 320, 1037-1051.	4.2	44
26	DNA damage recognition and repair by 3-methyladenine DNA glycosylase I (TAG). EMBO Journal, 2007, 26, 2411-2420.	7.8	43
27	A New Protein Architecture for Processing Alkylation Damaged DNA: The Crystal Structure of DNA Glycosylase AlkD. Journal of Molecular Biology, 2008, 381, 13-23.	4.2	40
28	Excision of 5-hydroxymethylcytosine by DEMETER family DNA glycosylases. Biochemical and Biophysical Research Communications, 2014, 446, 1067-1072.	2.1	37
29	The HIRAN domain of helicase-like transcription factor positions the DNA translocase motor to drive efficient DNA fork regression. Journal of Biological Chemistry, 2018, 293, 8484-8494.	3.4	35
30	A structure-specific nucleic acid-binding domain conserved among DNA repair proteins. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 7618-7623.	7.1	34
31	Structural Analysis of Replication Protein A Recruitment of the DNA Damage Response Protein SMARCAL1. Biochemistry, 2014, 53, 3052-3061.	2.5	33
32	Insights into Eukaryotic Primer Synthesis from Structures of the p48 Subunit of Human DNA Primase. Journal of Molecular Biology, 2014, 426, 558-569.	4.2	30
33	A Catalytic Role for Câ€“H/Ï€ Interactions in Base Excision Repair by Bacillus cereus DNA Glycosylase AlkD. Journal of the American Chemical Society, 2016, 138, 11485-11488.	13.7	26
34	An HPLCâ€“tandem mass spectrometry method for simultaneous detection of alkylated base excision repair products. Methods, 2013, 64, 59-66.	3.8	25
35	Structure of a DNA glycosylase that unhooks interstrand cross-links. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 4400-4405.	7.1	25
36	Unhooking of an interstrand cross-link at DNA fork structures by the DNA glycosylase NEIL3. DNA Repair, 2020, 86, 102752.	2.8	23

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37	Structure and DNA binding of alkylation response protein AidB. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 15299-15304.	7.1	22
38	Enhancing Integrin Î±1 Inserted (I) Domain Affinity to Ligand Potentiates Integrin Î±1Î²1-mediated Down-regulation of Collagen Synthesis. Journal of Biological Chemistry, 2012, 287, 35139-35152.	3.4	22
39	Toxicity and repair of DNA adducts produced by the natural product yatakemycin. Nature Chemical Biology, 2017, 13, 1002-1008.	8.0	21
40	Solution NMR Structure of the C-terminal DNA Binding Domain of Mcm10 Reveals a Conserved MCM Motif. Journal of Biological Chemistry, 2010, 285, 22942-22949.	3.4	19
41	5-Methylcytosine Recognition by <i>Arabidopsis thaliana</i> DNA Glycosylases DEMETER and DML3. Biochemistry, 2014, 53, 2525-2532.	2.5	18
42	Identification of a Substrate Recognition Domain in the Replication Stress Response Protein Zinc Finger Ran-binding Domain-containing Protein 3 (ZRANB3). Journal of Biological Chemistry, 2016, 291, 8251-8257.	3.4	18
43	The structures and relative stabilities of d(G Â· G) reverse hoogsteen, d(GÂ·T) reverse wobble, and d(G Â· C) reverse watson-crick base-pairs in DNA crystals 1 1Edited by I. Tinoco. Journal of Molecular Biology, 1997, 269, 796-810.	4.2	17
44	Selective base excision repair of DNA damage by the nonâ€baseâ€flipping DNA glycosylase AlkC. EMBO Journal, 2018, 37, 63-74.	7.8	17
45	Structural Biology of Replication Initiation Factor Mcm10. Sub-Cellular Biochemistry, 2012, 62, 197-216.	2.4	16
46	Mcm10 Self-Association Is Mediated by an N-Terminal Coiled-Coil Domain. PLoS ONE, 2013, 8, e70518.	2.5	16
47	The anti-parasitic agent suramin and several of its analogues are inhibitors of the DNA binding protein Mcm10. Open Biology, 2019, 9, 190117.	3.6	15
48	Structural biology of DNA abasic site protection by SRAP proteins. DNA Repair, 2020, 94, 102903.	2.8	15
49	An autoinhibitory role for the GRF zinc finger domain of DNA glycosylase NEIL3. Journal of Biological Chemistry, 2020, 295, 15566-15575.	3.4	14
50	Analysis of substrate specificity of <i>Schizosaccharomyces pombe</i> Mag1 alkylpurine DNA glycosylase. EMBO Reports, 2011, 12, 1286-1292.	4.5	13
51	Movement of the RecG Motor Domain upon DNA Binding Is Required for Efficient Fork Reversal. International Journal of Molecular Sciences, 2018, 19, 3049.	4.1	13
52	The substrate binding interface of alkylpurine DNA glycosylase AlkD. DNA Repair, 2014, 13, 50-54.	2.8	11
53	The Power of Pumping Together. Cell, 2004, 119, 3-4.	28.9	10
54	OUP accepted manuscript. Nucleic Acids Research, 2020, 48, 7005-7017.	14.5	10

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55	Depurination of N7-Methylguanine by DNA Glycosylase AlkD Is Dependent on the DNA Backbone. Biochemistry, 2013, 52, 7363-7365.	2.5	9
56	Structural Biology of the HEATâ€Like Repeat Family of DNA Glycosylases. BioEssays, 2018, 40, e1800133.	2.5	9
57	A New Family of HEAT-Like Repeat Proteins Lacking a Critical Substrate Recognition Motif Present in Related DNA Glycosylases. PLoS ONE, 2015, 10, e0127733.	2.5	8
58	Unraveling a Connection between DNA Demethylation Repair and Cancer. Molecular Cell, 2011, 44, 343-344.	9.7	7
59	Non-productive DNA damage binding by DNA glycosylase-like protein Mag2 from Schizosaccharomyces pombe. DNA Repair, 2013, 12, 196-204.	2.8	5
60	Structural evolution of a DNA repair self-resistance mechanism targeting genotoxic secondary metabolites. Nature Communications, 2021, 12, 6942.	12.8	5
61	OUP accepted manuscript. Nucleic Acids Research, 2022, , .	14.5	5
62	Interplay between base excision repair activity and toxicity of 3-methyladenine DNA glycosylases in an E. coli complementation system. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2014, 763-764, 64-73.	1.0	3
63	Structural Studies of Alkylpurine DNA Glycosylases. ACS Symposium Series, 2010, , 29-45.	0.5	2
64	Resistance-Guided Mining of Bacterial Genotoxins Defines a Family of DNA Glycosylases. MBio, 2022, 13, e0329721.	4.1	2
65	Base Excision Repair of Bulky DNA Adducts Generated by the Antitumor Drug Yatakemycin. FASEB Journal, 2016, 30, 791.2.	0.5	0