Junpei Yamamoto

List of Publications by Citations

55 papers	729 citations	16 h-index	26 g-index
58 ext. papers	858 ext. citations	8.5 avg, IF	3.74 L-index

#	Paper	IF	Citations
55	Functional motifs in the (6-4) photolyase crystal structure make a comparative framework for DNA repair photolyases and clock cryptochromes. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 6962-7	11.5	96
54	Discovery and functional analysis of a 4th electron-transferring tryptophan conserved exclusively in animal cryptochromes and (6-4) photolyases. *Chemical Communications*, **2015**, 51, 15502-5	5.8	74
53	Repriming by PrimPol is critical for DNA replication restart downstream of lesions and chain-terminating nucleosides. *Cell Cycle*, **2016**, 15, 1997-2008	4.7	58
52	DNA damage detection in nucleosomes involves DNA register shifting. *Nature*, **2019**, 571, 79-84	50.4	41
51	Repair of the (6-4) photoproduct by DNA photolyase requires two photons. *Angewandte Chemie - International Edition*, **2013**, 52, 7432-6	16.4	37
50	Structural basis of pyrimidine-pyrimidone (6-4) photoproduct recognition by UV-DDB in the nucleosome. *Scientific Reports*, **2015**, 5, 16330	4.9	32
49	Structure of the bifunctional cryptochrome aCRY from Chlamydomonas reinhardtii. *Nucleic Acids Research*, **2018**, 46, 8010-8022	20.1	28
48	Role of the carbonyl group of the (6-4) photoproduct in the (6-4) photolyase reaction. *Biochemistry*, **2009**, 48, 9306-12	3.2	26
47	Repair of (6-4) Lesions in DNA by (6-4) Photolyase: 20 Years of Quest for the Photoreaction Mechanism. *Photochemistry and Photobiology*, **2017**, 93, 51-66	3.6	25
46	Abacavir, an anti-HIV-1 drug, targets TDP1-deficient adult T cell leukemia. *Science Advances*, **2015**, 1, e1400203	14.3	24
45	Light-induced conformational change and product release in DNA repair by (6-4) photolyase. *Journal of the American Chemical Society*, **2011**, 133, 2183-91	16.4	23
44	Chemical synthesis of oligodeoxyribonucleotides containing the Dewar valence isomer of the (6-4) photoproduct and their use in (6-4) photolyase studies. *Nucleic Acids Research*, **2006**, 34, 4406-15	20.1	23
43	FTIR study of light-dependent activation and DNA repair processes of (6-4) photolyase. *Biochemistry*, **2011**, 50, 3591-8	3.2	20
42	Detection of distinct α-helical rearrangements of cyclobutane pyrimidine dimer photolyase upon substrate binding by Fourier transform infrared spectroscopy. *Biochemistry*, **2013**, 52, 1019-27	3.2	19
41	Spectroscopic analysis of the pyrimidine(6-4)pyrimidone photoproduct: insights into the (6-4) photolyase reaction. *Organic and Biomolecular Chemistry*, **2009**, 7, 161-6	3.9	17
40	Loss of Fourth Electron-Transferring Tryptophan in Animal (6-4) Photolyase Impairs DNA Repair Activity in Bacterial Cells. *Biochemistry*, **2017**, 56, 5356-5364	3.2	16
39	Ultrafast flavin photoreduction in an oxidized animal (6-4) photolyase through an unconventional tryptophan tetrad. *Physical Chemistry Chemical Physics*, **2017**, 19, 24493-24504	3.6	16

38	Acetaldehyde forms covalent GG intrastrand crosslinks in DNA. *Scientific Reports*, **2019**, 9, 660	4.9	15
37	Functional Conversion of CPD and (6-4) Photolyases by Mutation. *Biochemistry*, **2016**, 55, 4173-83	3.2	14
36	The dominant role of proofreading exonuclease activity of replicative polymerase in cellular tolerance to cytarabine (Ara-C). *Oncotarget*, **2017**, 8, 33457-33474	3.3	14
35	Substrate Assignment of the (6-4) Photolyase Reaction by FTIR Spectroscopy. *Journal of Physical Chemistry Letters*, **2011**, 2, 2774-2777	6.4	13
34	Flavin adenine dinucleotide chromophore charge controls the conformation of cyclobutane pyrimidine dimer photolyase helices. *Biochemistry*, **2014**, 53, 5864-75	3.2	11
33	Structural Changes of the Active Center during the Photoactivation of Xenopus (6-4) Photolyase. *Biochemistry*, **2016**, 55, 715-23	3.2	8
32	Structural role of two histidines in the (6-4) photolyase reaction. *Biophysics and Physicobiology*, **2015**, 12, 139-44	1.4	8
31	Coulomb and CH- interactions in (6-4) photolyase-DNA complex dominate DNA binding and repair abilities. *Nucleic Acids Research*, **2018**, 46, 6761-6772	20.1	8
30	FTIR study of CPD photolyase with substrate in single strand DNA. *Biophysics (Nagoya-shi, Japan)*, **2015**, 11, 39-45		7
29	A cyclobutane thymine-N4-methylcytosine dimer is resistant to hydrolysis but strongly blocks DNA synthesis. *Nucleic Acids Research*, **2014**, 42, 2075-84	20.1	7
28	Photosensitized [2 + 2] cycloaddition of N-acetylated cytosine affords stereoselective formation of cyclobutane pyrimidine dimer. *Nucleic Acids Research*, **2011**, 39, 1165-75	20.1	7
27	Translesion synthesis across the (6-4) photoproduct and its Dewar valence isomer by the Y-family and engineered DNA polymerases. *Nucleic Acids Symposium Series*, **2008**, 339-40		6
26	Fluorescence detection of DNA mismatch repair in human cells. *Scientific Reports*, **2018**, 8, 12181	4.9	5
25	Repair of the (6) Photoproduct by DNA Photolyase Requires Two Photons. *Angewandte Chemie*, **2013**, 125, 7580-7584	3.6	5
24	Enhanced DNA repair by DNA photolyase bearing an artificial light-harvesting chromophore. *Nucleic Acids Research*, **2020**, 48, 10076-10086	20.1	4
23	Twist and turn: a revised structural view on the unpaired bubble of class II CPD photolyase in complex with damaged DNA. *IUCrJ*, **2018**, 5, 608-618	4.7	3
22	Mutational analysis of Thermococcus kodakarensis Endonuclease III reveals the roles of evolutionarily conserved residues. *DNA Repair*, **2020**, 90, 102859	4.3	3
21	Chemical Incorporation of Chain-Terminating Nucleoside Analogs as 3-Blocking DNA Damage and Their Removal by Human ERCC1-XPF Endonuclease. *Molecules*, **2016**, 21,	4.8	3

20	Implications of a Water Molecule for Photoactivation of Plant (6-4) Photolyase. *Journal of Physical Chemistry B*, **2019**, 123, 5059-5068	3.4	2
19	Spectroscopic studies on a novel intramolecular hydrogen bond within the (6-4) photoproduct. *Nucleic Acids Symposium Series*, **2007**, 79-80		2
18	Theoretical insights into the DNA repair function of cryptochrome-DASH. *Biophysics and Physicobiology*, **2020**, 17, 113-124	1.4	2
17	Inhibiting guanine oxidation and enhancing the excess-electron-transfer efficiency of a pyrene-modified oligonucleotide by introducing an electron-donating group on pyrene. *Chemical Communications*, **2019**, 55, 14062-14065	5.8	2
16	Recognition and reaction mechanisms of the (6-4) photolyase as determined by using a (6-4) photoproduct analog. *Nucleic Acids Symposium Series*, **2009**, 221-2		1
15	Synthesis of oligonucleotides containing the Dewar valence isomer of the (6-4) photoproduct and their application to (6-4) photolyase studies. *Nucleic Acids Symposium Series*, **2006**, 61-2		1
14	Analysis of structural flexibility of damaged DNA using thiol-tethered oligonucleotide duplexes. *PLoS ONE*, **2015**, 10, e0117798	3.7	1
13	Plant organellar DNA polymerases bypass thymine glycol using two conserved lysine residues. *Biochemical Journal*, **2020**, 477, 1049-1059	3.8	1
12	Structural Changes during the Photorepair and Binding Processes of (6-4) Photolyase with (6-4) Photoproducts in Single- and Double-Stranded DNA. *Biochemistry*, **2021**, 60, 3253-3261	3.2	0
11	Key interactions with deazariboflavin cofactor for light-driven energy transfer in Xenopus (6-4) photolyase. *Photochemical and Photobiological Sciences*, **2021**, 20, 875-887	4.2	0
10	Kinetics of Electron Returns in Successive Two-Photon DNA Repair by (6-4) Photolyase. *ACS Catalysis*, **2022**, 12, 3041-3045	13.1	0
9	Limited solvation of an electron donating tryptophan stabilizes a photoinduced charge-separated state in plant (6-4) photolyase.. *Scientific Reports*, **2022**, 12, 5084	4.9	0
8	Molecular Mechanism of the Two-photon DNA Repair by the (6-4)Photolyase. *Seibutsu Butsuri*, **2015** , 55, 157-158	0	
7	1P249 FTIR study of isotope-labeled CPD-Photolyase(18A. Photobiology: Vision & Photoreception,Poster). *Seibutsu Butsuri*, **2013**, 53, S147	0	
6	3Q1422 FTIR Study of Light-Dependent Activation and DNA Repair Processes of E. coli CPD Photolyase(Photobiology : Vision & Photoreception4,The 49th Annual Meeting of the Biophysical Society of Japan). *Seibutsu Butsuri*, **2011**, 51, S161-S162	0	
5	3Q1434 Spectroscopic study of light-dependent activation and DNA repair processes of(Photobiology : Vision & Photoreception4,The 49th Annual Meeting of the Biophysical Society of Japan). *Seibutsu Butsuri*, **2011**, 51, S162	0	
4	1P123 Low-temperature FTIR study of photoactivation and photorepair processes of (6-4) photolyase(Nucleic acid binding proteins,The 48th Annual Meeting of the Biophysical Society of Japan). *Seibutsu Butsuri*, **2010**, 50, S41	0	
3	3P-211 Direct observation of enzymatic (6-4) photoproduct conversion by FTIR spectroscopy(Photobiology:Vision & Photoreception,The 47th Annual Meeting of the Biophysical Society of Japan). *Seibutsu Butsuri*, **2009**, 49, S186-S187	0	

2 3P264 FTIR Study of Photorepair of Single Strand DNA Lesion by Cryptochrome DASH(Photobiology: Vision & Photoreception,The 48th Annual Meeting of the Biophysical Society of Japan). *Seibutsu Butsuri*, **2010**, 50, S191-S192 0

1 Theoretical Analyses for DNA Repair Function of Cryptochrome-DASH. *Seibutsu Butsuri*, **2022**, 62, 116-118