Pawel Jaruga

List of Publications by Citations

104 papers	8,426 citations	44 h-index	91 g-index
108 ext. papers	8,953 ext. citations	6.3 avg, IF	5.81 L-index

#	Paper	IF	Citations
104	Linking uracil base excision repair and 5-fluorouracil toxicity in yeast. *Nucleic Acids Research*, **2006**, 34, 140-51	20.1	1531
103	Free radical-induced damage to DNA: mechanisms and measurement. *Free Radical Biology and Medicine*, **2002**, 32, 1102-15	7.8	710
102	Identification and characterization of a human DNA glycosylase for repair of modified bases in oxidatively damaged DNA. *Proceedings of the National Academy of Sciences of the United States of America*, **2002**, 99, 3523-8	11.5	409
101	Mechanisms of free radical-induced damage to DNA. *Free Radical Research*, **2012**, 46, 382-419	4	407
100	Copper oxide nanoparticle mediated DNA damage in terrestrial plant models. *Environmental Science & Technology*, **2012**, 46, 1819-27	10.3	356
99	DNA damage and DNA sequence retrieval from ancient tissues. *Nucleic Acids Research*, **1996**, 24, 1304-7	20.1	300
98	Oxidative DNA damage: assessment of the role in carcinogenesis, atherosclerosis, and acquired immunodeficiency syndrome. *Free Radical Biology and Medicine*, **2002**, 33, 192-200	7.8	215
97	New functions of XPC in the protection of human skin cells from oxidative damage. *EMBO Journal*, **2006**, 25, 4305-15	13	204
96	Repair of products of oxidative DNA base damage in human cells. *Nucleic Acids Research*, **1996**, 24, 1389-94	20.1	198
95	Regulation of reactive oxygen species, DNA damage, and c-Myc function by peroxiredoxin 1. *Oncogene*, **2005**, 24, 8038-50	9.2	181
94	Oxidative DNA base damage and antioxidant enzyme activities in human lung cancer. *FEBS Letters*, **1994**, 341, 59-64	3.8	172
93	Repair of formamidopyrimidines in DNA involves different glycosylases: role of the OGG1, NTH1, and NEIL1 enzymes. *Journal of Biological Chemistry*, **2005**, 280, 40544-51	5.4	160
92	The mouse ortholog of NEIL3 is a functional DNA glycosylase in vitro and in vivo. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 4925-30	11.5	144
91	Primary fibroblasts of Cockayne syndrome patients are defective in cellular repair of 8-hydroxyguanine and 8-hydroxyadenine resulting from oxidative stress. *FASEB Journal*, **2003**, 17, 668-74	8.9	127
90	The role of CSA in the response to oxidative DNA damage in human cells. *Oncogene*, **2007**, 26, 4336-43	9.2	126
89	Kinetics of excision of purine lesions from DNA by Escherichia coli Fpg protein. *Nucleic Acids Research*, **1997**, 25, 474-9	20.1	125
88	The Cockayne Syndrome group B gene product is involved in general genome base excision repair of 8-hydroxyguanine in DNA. *Journal of Biological Chemistry*, **2001**, 276, 45772-9	5.4	117

87	Polyamines stimulate the formation of mutagenic 1,N2-propanodeoxyguanosine adducts from acetaldehyde. *Nucleic Acids Research*, **2005**, 33, 3513-20	20.1	107
86	8,5'-Cyclopurine-2'-deoxynucleosides in DNA: mechanisms of formation, measurement, repair and biological effects. *DNA Repair*, **2008**, 7, 1413-25	4.3	101
85	Measurement of 8-hydroxy-2'-deoxyguanosine in DNA by high-performance liquid chromatography-mass spectrometry: comparison with measurement by gas chromatography-mass spectrometry. *Nucleic Acids Research*, **2001**, 29, E12	20.1	97
84	Targeted deletion of the genes encoding NTH1 and NEIL1 DNA N-glycosylases reveals the existence of novel carcinogenic oxidative damage to DNA. *DNA Repair*, **2009**, 8, 786-94	4.3	89
83	Formamidopyrimidines in DNA: mechanisms of formation, repair, and biological effects. *Free Radical Biology and Medicine*, **2008**, 45, 1610-21	7.8	89
82	Genomic DNA of Nostoc commune (Cyanobacteria) becomes covalently modified during long-term (decades) desiccation but is protected from oxidative damage and degradation. *Nucleic Acids Research*, **2003**, 31, 2995-3005	20.1	88
81	Mass spectrometric assays for the tandem lesion 8,5'-cyclo-2'-deoxyguanosine in mammalian DNA. *Biochemistry*, **2002**, 41, 3703-11	3.2	83
80	Mouse NEIL1 protein is specific for excision of 2,6-diamino-4-hydroxy-5-formamidopyrimidine and 4,6-diamino-5-formamidopyrimidine from oxidatively damaged DNA. *Biochemistry*, **2004**, 43, 15909-14	3.2	80
79	DNA base damage by the antitumor agent 3-amino-1,2,4-benzotriazine 1,4-dioxide (tirapazamine). *Journal of the American Chemical Society*, **2003**, 125, 11607-15	16.4	80
78	Cellular repair of oxidatively induced DNA base lesions is defective in prostate cancer cell lines, PC-3 and DU-145. *Carcinogenesis*, **2004**, 25, 1359-70	4.6	75
77	Identification and quantification of 8,5'-cyclo-2'-deoxy-adenosine in DNA by liquid chromatography/ mass spectrometry. *Free Radical Biology and Medicine*, **2001**, 30, 774-84	7.8	73
76	The cockayne syndrome group B gene product is involved in cellular repair of 8-hydroxyadenine in DNA. *Journal of Biological Chemistry*, **2002**, 277, 30832-7	5.4	73
75	Characterization and mechanism of action of Drosophila ribosomal protein S3 DNA glycosylase activity for the removal of oxidatively damaged DNA bases. *Journal of Biological Chemistry*, **1997**, 272, 32857-60	5.4	69
74	Supplementation with antioxidant vitamins prevents oxidative modification of DNA in lymphocytes of HIV-infected patients. *Free Radical Biology and Medicine*, **2002**, 32, 414-20	7.8	69
73	Accumulation of (5'*S*)-8,5'-cyclo-2'-deoxyadenosine in organs of Cockayne syndrome complementation group B gene knockout mice. *DNA Repair*, **2009**, 8, 274-8	4.3	61
72	Human polymorphic variants of the NEIL1 DNA glycosylase. *Journal of Biological Chemistry*, **2007**, 282, 15790-8	5.4	58
71	Complete release of (5'*S*)-8,5'-cyclo-2'-deoxyadenosine from dinucleotides, oligodeoxynucleotides and DNA, and direct comparison of its levels in cellular DNA with other oxidatively induced DNA lesions. *Nucleic Acids Research*, **2004**, 32, e87	20.1	58
70	A major role for nonenzymatic antioxidant processes in the radioresistance of Halobacterium salinarum. *Journal of Bacteriology*, **2011**, 193, 1653-62	3.5	51

69	Salt shield: intracellular salts provide cellular protection against ionizing radiation in the halophilic archaeon, Halobacterium salinarum NRC-1. *Environmental Microbiology*, **2009**, 11, 1066-78	5.2	50
68	Lymphoblasts of women with BRCA1 mutations are deficient in cellular repair of 8,5′-Cyclopurine-2′-deoxynucleosides and 8-hydroxy-2′-deoxyguanosine. *Biochemistry*, **2007**, 46, 2488-96	3.2	50
67	Evidence for the involvement of DNA repair enzyme NEIL1 in nucleotide excision repair of (5′R)- and (5′S)-8,5′-cyclo-2′-deoxyadenosines. *Biochemistry*, **2010**, 49, 1053-5	3.2	48
66	Measurement of oxidatively induced DNA damage and its repair, by mass spectrometric techniques. *Free Radical Research*, **2015**, 49, 525-48	4	47
65	Repair of oxidatively induced DNA damage by DNA glycosylases: Mechanisms of action, substrate specificities and excision kinetics. *Mutation Research - Reviews in Mutation Research*, **2017**, 771, 99-127	7	46
64	Oxidative DNA base damage and its repair in kidneys and livers of nickel(II)-treated male F344 rats. *Carcinogenesis*, **1997**, 18, 271-7	4.6	46
63	Small Molecule Inhibitors of 8-Oxoguanine DNA Glycosylase-1 (OGG1). *ACS Chemical Biology*, **2015**, 10, 2334-43	4.9	45
62	Accumulation of Oxidatively Induced DNA Damage in Human Breast Cancer Cell Lines Following Treatment with Hydrogen Peroxide. *Cell Cycle*, **2007**, 6, 1471-1477	4.7	45
61	Measurement of formamidopyrimidines in DNA. *Free Radical Biology and Medicine*, **2008**, 45, 1601-9	7.8	44
60	Substrate specificity and excision kinetics of Escherichia coli endonuclease VIII (Nei) for modified bases in DNA damaged by free radicals. *Biochemistry*, **2001**, 40, 12150-6	3.2	43
59	Oxidative DNA damage in polymorphonuclear leukocytes of patients with familial Mediterranean fever. *Free Radical Biology and Medicine*, **2008**, 44, 386-93	7.8	40
58	Substrate specificity and excision kinetics of natural polymorphic variants and phosphomimetic mutants of human 8-oxoguanine-DNA glycosylase. *FEBS Journal*, **2009**, 276, 5149-62	5.7	37
57	Structural and biochemical studies of a plant formamidopyrimidine-DNA glycosylase reveal why eukaryotic Fpg glycosylases do not excise 8-oxoguanine. *DNA Repair*, **2012**, 11, 714-25	4.3	35
56	Measurement of (5′R)- and (5′S)-8,5′-cyclo-2′-deoxyadenosines in DNA in vivo by liquid chromatography/isotope-dilution tandem mass spectrometry. *Biochemical and Biophysical Research Communications*, **2009**, 386, 656-60	3.4	35
55	The oxidative DNA glycosylases of Mycobacterium tuberculosis exhibit different substrate preferences from their Escherichia coli counterparts. *DNA Repair*, **2010**, 9, 177-90	4.3	35
54	Arabidopsis thaliana Ogg1 protein excises 8-hydroxyguanine and 2,6-diamino-4-hydroxy-5-formamidopyrimidine from oxidatively damaged DNA containing multiple lesions. *Biochemistry*, **2003**, 42, 3089-95	3.2	35
53	Determination of active site residues in Escherichia coli endonuclease VIII. *Journal of Biological Chemistry*, **2002**, 277, 2938-44	5.4	34
52	Active transcriptomic and proteomic reprogramming in the C. elegans nucleotide excision repair mutant xpa-1. *Nucleic Acids Research*, **2013**, 41, 5368-81	20.1	33

51	Molecular analysis of base damage clustering associated with a site-specific radiation-induced DNA double-strand break. *Radiation Research*, **2006**, 166, 767-81	3.1	33
50	DNA damage products (5*R*)- and (5*S*)-8,5-cyclo-2-deoxyadenosines as potential biomarkers in human urine for atherosclerosis. *Biochemistry*, **2012**, 51, 1822-4	3.2	32
49	Biomarkers signal contaminant effects on the organs of English sole (Parophrys vetulus) from Puget Sound. *Environmental Health Perspectives*, **2006**, 114, 823-9	8.4	32
48	Bisphenol a promotes cell survival following oxidative DNA damage in mouse fibroblasts. *PLoS ONE* , **2015**, 10, e0118819	3.7	31
47	Measurement of 8-hydroxy-2-deoxyadenosine in DNA by liquid chromatography/mass spectrometry. *Free Radical Biology and Medicine*, **2001**, 31, 336-44	7.8	31
46	Epirubicin-induced oxidative DNA damage and evidence for its repair in lymphocytes of cancer patients who are undergoing chemotherapy. *Molecular Pharmacology*, **1997**, 52, 882-5	4.3	30
45	Inhibition of DNA glycosylases via small molecule purine analogs. *PLoS ONE*, **2013**, 8, e81667	3.7	29
44	Oxidative changes in the DNA of stroma and epithelium from the female breast: potential implications for breast cancer. *Cell Cycle*, **2006**, 5, 1629-32	4.7	29
43	Structural alterations in breast stromal and epithelial DNA: the influence of 8,5-cyclo-2-deoxyadenosine. *Cell Cycle*, **2006**, 5, 1240-4	4.7	29
42	Plant and fungal Fpg homologs are formamidopyrimidine DNA glycosylases but not 8-oxoguanine DNA glycosylases. *DNA Repair*, **2009**, 8, 643-53	4.3	28
41	Oxidative DNA base modifications and polycyclic aromatic hydrocarbon DNA adducts in squamous cell carcinoma of larynx. *Free Radical Research*, **2003**, 37, 231-40	4	28
40	DNA base damage in lymphocytes of cancer patients undergoing radiation therapy. *Cancer Letters*, **1996**, 106, 207-15	9.9	27
39	Addiction to MTH1 protein results in intense expression in human breast cancer tissue as measured by liquid chromatography-isotope-dilution tandem mass spectrometry. *DNA Repair*, **2015**, 33, 101-10	4.3	25
38	Identification and quantification of (5*R*)- and (5*S*)-8,5-cyclo-2-deoxyadenosines in human urine as putative biomarkers of oxidatively induced damage to DNA. *Biochemical and Biophysical Research Communications*, **2010**, 397, 48-52	3.4	24
37	The oxidatively induced DNA lesions 8,5-cyclo-2-deoxyadenosine and 8-hydroxy-2-deoxyadenosine are strongly resistant to acid-induced hydrolysis of the glycosidic bond. *Mechanisms of Ageing and Development*, **2007**, 128, 494-502	5.6	24
36	Reduced repair of 8-hydroxyguanine in the human breast cancer cell line, HCC1937. *BMC Cancer*, **2006**, 6, 297	4.8	24
35	Glutathione depletion by buthionine sulfoximine induces oxidative damage to DNA in organs of rabbits in vivo. *Biochemistry*, **2009**, 48, 4980-7	3.2	23
34	Identification and quantification of human DNA repair protein NEIL1 by liquid chromatography/isotope-dilution tandem mass spectrometry. *Journal of Proteome Research*, **2013**, 12, 1049-61	5.6	22

33	Evidence for upregulated repair of oxidatively induced DNA damage in human colorectal cancer. *DNA Repair*, **2011**, 10, 1114-20	4.3	20
32	Accumulation of oxidatively induced DNA damage in human breast cancer cell lines following treatment with hydrogen peroxide. *Cell Cycle*, **2007**, 6, 1472-8	4.7	20
31	Overexpression and rapid purification of Escherichia coli formamidopyrimidine-DNA glycosylase. *Protein Expression and Purification*, **2004**, 34, 126-33	2	19
30	Chlorella virus pyrimidine dimer glycosylase excises ultraviolet radiation- and hydroxyl radical-induced products 4,6-diamino-5-formamidopyrimidine and 2,6-diamino-4-hydroxy-5-formamidopyrimidine from DNA. *Photochemistry and Photobiology*, **2002**, 75, 85-91	3.6	19
29	Biomarkers of oxidatively induced DNA damage in dreissenid mussels: A genotoxicity assessment tool for the Laurentian Great Lakes. *Environmental Toxicology*, **2017**, 32, 2144-2153	4.2	18
28	Identification and quantification of DNA repair proteins by liquid chromatography/isotope-dilution tandem mass spectrometry using their fully 15N-labeled analogues as internal standards. *Journal of Proteome Research*, **2011**, 10, 3802-13	5.6	18
27	Combined Effects of High-Dose Bisphenol A and Oxidizing Agent (KBrO3) on Cellular Microenvironment, Gene Expression, and Chromatin Structure of Ku70-deficient Mouse Embryonic Fibroblasts. *Environmental Health Perspectives*, **2016**, 124, 1241-52	8.4	18
26	Exposure to Engineered Nanomaterials: Impact on DNA Repair Pathways. *International Journal of Molecular Sciences*, **2017**, 18,	6.3	17
25	Stable isotope-labeling of DNA repair proteins, and their purification and characterization. *Protein Expression and Purification*, **2011**, 78, 94-101	2	15
24	Extreme Expression of DNA Repair Protein Apurinic/Apyrimidinic Endonuclease 1 (APE1) in Human Breast Cancer As Measured by Liquid Chromatography and Isotope Dilution Tandem Mass Spectrometry. *Biochemistry*, **2015**, 54, 5787-90	3.2	14
23	Aflatoxin-Guanine DNA Adducts and Oxidatively Induced DNA Damage in Aflatoxin-Treated Mice in Vivo as Measured by Liquid Chromatography-Tandem Mass Spectrometry with Isotope Dilution. *Chemical Research in Toxicology*, **2019**, 32, 80-89	4	14
22	RNA oxidation catalyzed by cytochrome c leads to its depurination and cross-linking, which may facilitate cytochrome c release from mitochondria. *Free Radical Biology and Medicine*, **2012**, 53, 854-62	7.8	12
21	Identification and quantification of DNA repair protein apurinic/apyrimidinic endonuclease 1 (APE1) in human cells by liquid chromatography/isotope-dilution tandem mass spectrometry. *PLoS ONE*, **2013**, 8, e69894	3.7	12
20	Oxidative DNA base damage in lymphocytes of HIV-infected drug users. *Free Radical Research*, **1999**, 31, 197-200	4	8
19	Production, Purification, and Characterization of □N-Labeled DNA Repair Proteins as Internal Standards for Mass Spectrometric Measurements. *Methods in Enzymology*, **2016**, 566, 305-32	1.7	7
18	Measurement of DNA biomarkers for the safety of tissue-engineered medical products, using artificial skin as a model. *Tissue Engineering*, **2004**, 10, 1332-45		7
17	Recognition of DNA adducts by edited and unedited forms of DNA glycosylase NEIL1. *DNA Repair*, **2020**, 85, 102741	4.3	7
16	Enhanced sensitivity of Neil1 mice to chronic UVB exposure. *DNA Repair*, **2016**, 48, 43-50	4.3	6

15	Significant disparity in base and sugar damage in DNA resulting from neutron and electron irradiation. *Journal of Radiation Research*, **2014**, 55, 1081-8	2.4	6
14	Heavy ion space radiation triggers ongoing DNA base damage by downregulating DNA repair pathways. *Life Sciences in Space Research*, **2020**, 27, 27-32	2.4	6
13	Measurement of Oxidatively Induced DNA Damage in with High-Salt DNA Extraction and Isotope-Dilution Mass Spectrometry. *Analytical Chemistry*, **2019**, 91, 12149-12155	7.8	4
12	Characterization of rare NEIL1 variants found in East Asian populations. *DNA Repair*, **2019**, 79, 32-39	4.3	4
11	Expression of a germline variant in the N-terminal domain of the human DNA glycosylase NTHL1 induces cellular transformation without impairing enzymatic function or substrate specificity. *Oncotarget*, **2020**, 11, 2262-2272	3.3	4
10	Identification and quantification of DNA repair protein poly(ADP ribose) polymerase 1 (PARP1) in human tissues and cultured cells by liquid chromatography/isotope-dilution tandem mass spectrometry. *DNA Repair*, **2019**, 75, 48-59	4.3	3
9	Excision release of 5?hydroxycytosine oxidatively induced DNA base lesions from the lung genome by cat dander extract challenge stimulates allergic airway inflammation. *Clinical and Experimental Allergy*, **2018**, 48, 1676-1687	4.1	3
8	Oxidative DNA damage biomarkers used in tissue engineered skin. *Advances in Experimental Medicine and Biology*, **2003**, 534, 129-35	3.6	3
7	Oxidative DNA base damage in cancerous tissues of patients undergoing brachytherapy. *Cancer Letters*, **1998**, 132, 169-73	9.9	2
6	Ne-22 Ion-Beam Radiation Damage to DNA: From Initial Free Radical Formation to Resulting DNA-Base Damage. *ACS Omega*, **2021**, 6, 16600-16611	3.9	2
5	Inhibition by Tetrahydroquinoline Sulfonamide Derivatives of the Activity of Human 8-Oxoguanine DNA Glycosylase (OGG1) for Several Products of Oxidatively induced DNA Base Lesions. *ACS Chemical Biology*, **2021**, 16, 45-51	4.9	0
4	DNA glycosylase deficiency leads to decreased severity of lupus in the Polb-Y265C mouse model. *DNA Repair*, **2021**, 105, 103152	4.3	0
3	Chlorella Virus Pyrimidine Dimer Glycosylase Excises Ultraviolet Radiation□and Hydroxyl Radical□nduced Products 4,6-Diamino-5-formamidopyrimidine and 2,6-Diamino-4-hydroxy-5-formamidopyrimidine from DNA□. *Photochemistry and Photobiology*, **2007**, 75, 85-91	3.6	
2	Biomarkers used to detect genetic damage in tissue engineered skin. *Advances in Experimental Medicine and Biology*, **2003**, 534, 137-45	3.6	
1	Estimation Of Free Radical Induced DNA Base Damages in Cancerous- and HIV Infected Patients and in Healthy Subjects **1999**, 353-369		