

Alexander Bäcker

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7693064/publications.pdf>

Version: 2024-02-01

225
papers

10,293
citations

26630

56
h-index

48315

88
g-index

232
all docs

232
docs citations

232
times ranked

11485
citing authors

#	ARTICLE	IF	CITATIONS
1	Physiology and pathophysiology of poly(ADP-ribosyl)ation *. BioEssays, 2001, 23, 795-806.	2.5	303
2	Poly(ADP-ribose). The most elaborate metabolite of NAD+. FEBS Journal, 2005, 272, 4576-4589.	4.7	266
3	Poly(ADP-ribose) polymerase activity in mononuclear leukocytes of 13 mammalian species correlates with species-specific life span.. Proceedings of the National Academy of Sciences of the United States of America, 1992, 89, 11759-11763.	7.1	262
4	Inactivation of the Poly(ADP-ribose) Polymerase Gene Affects Oxygen Radical and Nitric Oxide Toxicity in Islet Cells. Journal of Biological Chemistry, 1995, 270, 11176-11180.	3.4	258
5	Reconfiguration of DNA methylation in aging. Mechanisms of Ageing and Development, 2015, 151, 60-70.	4.6	227
6	Lethal recessive myelin toxicity of prion protein lacking its central domain. EMBO Journal, 2007, 26, 538-547.	7.8	202
7	DNA amplification of adeno-associated virus as a response to cellular genotoxic stress. Cancer Research, 1988, 48, 3123-9.	0.9	192
8	Manganese superoxide dismutase and aldehyde dehydrogenase deficiency increase mitochondrial oxidative stress and aggravate age-dependent vascular dysfunction. Cardiovascular Research, 2008, 80, 280-289.	3.8	190
9	MARK-AGE biomarkers of ageing. Mechanisms of Ageing and Development, 2015, 151, 2-12.	4.6	189
10	Stress, DNA damage and ageing â€” an integrative approach. Experimental Gerontology, 2001, 36, 1049-1062.	2.8	182
11	Poly(ADP-ribose): PARadigms and PARadoxes. Molecular Aspects of Medicine, 2013, 34, 1046-1065.	6.4	166
12	Opportunities for the repurposing of PARP inhibitors for the therapy of nonâ€œoncological diseases. British Journal of Pharmacology, 2018, 175, 192-222.	5.4	160
13	The adeno-associated virus rep gene suppresses herpes simplex virus-induced DNA amplification. Journal of Virology, 1990, 64, 3012-3018.	3.4	152
14	Quantitative analysis of the binding affinity of poly(ADP-ribose) to specific binding proteins as a function of chain length. Nucleic Acids Research, 2007, 35, e143-e143.	14.5	133
15	Interference by toxic metal ions with zinc-dependent proteins involved in maintaining genomic stability. Food and Chemical Toxicology, 2002, 40, 1179-1184.	3.6	132
16	<i>trans</i> -Dominant Inhibition of Poly(ADP-Ribosyl)ation Sensitizes Cells against γ -Irradiation and <i>N</i> -Methyl- <i>N</i> - ϵ^2 -Nitro- <i>N</i> -Nitrosoguanidine but Does Not Limit DNA Replication of a Polyomavirus Replicon. Molecular and Cellular Biology, 1995, 15, 3154-3163.	2.3	125
17	Increased poly(ADP-ribose) polymerase activity in lymphoblastoid cell lines from centenarians. Journal of Molecular Medicine, 1998, 76, 346-354.	3.9	125
18	Overexpression of Nonconvertible PrP ^c τ 114â€œ121 in Scrapie-Infected Mouse Neuroblastoma Cells Leads to <i>trans</i> -Dominant Inhibition of Wild-Type PrP ^c <i>Sc</i> Accumulation. Journal of Virology, 1998, 72, 1153-1159.	3.4	121

#	ARTICLE	IF	CITATIONS
19	Reactive oxygen species participate in mdrlb mRNA and P-glycoprotein overexpression in primary rat hepatocyte cultures. Carcinogenesis, 1999, 20, 407-414.	2.8	111
20	Increased poly(ADP-ribosyl)ation in intact cells by cisplatin treatment. Carcinogenesis, 1993, 14, 559-561.	2.8	108
21	Overproduction of the poly(ADP-ribose) polymerase DNA-binding domain blocks alkylation-induced DNA repair synthesis in mammalian cells. EMBO Journal, 1993, 12, 2109-17.	7.8	99
22	Pleiotropic Cellular Functions of PARP1 in Longevity and Aging: Genome Maintenance Meets Inflammation. Oxidative Medicine and Cellular Longevity, 2012, 2012, 1-19.	4.0	97
23	Poly(ADP-ribosyl)ation in mammalian ageing. Nucleic Acids Research, 2007, 35, 7456-7465.	14.5	94
24	Poly(ADP-ribose) binding to Chk1 at stalled replication forks is required for S-phase checkpoint activation. Nature Communications, 2013, 4, 2993.	12.8	94
25	Poly-ADP-ribosylation in health and disease. Cellular and Molecular Life Sciences, 2005, 62, 721-730.	5.4	93
26	Do people living with HIV experience greater age advancement than their HIV-negative counterparts?. Aids, 2019, 33, 259-268.	2.2	93
27	DEK Is a Poly(ADP-Ribose) Acceptor in Apoptosis and Mediates Resistance to Genotoxic Stress. Molecular and Cellular Biology, 2008, 28, 3245-3257.	2.3	92
28	Poly(ADP-ribosyl)ation, a DNA damage-driven protein modification and regulator of genomic instability. Cancer Letters, 2001, 163, 1-5.	7.2	91
29	Increase in <i>de novo</i> HBV DNA integrations in response to oxidative DNA damage or inhibition of poly(ADP-ribosyl)ation. Hepatology, 2002, 35, 217-223.	7.3	89
30	Neuroprotection by Minocycline Caused by Direct and Specific Scavenging of Peroxynitrite. Journal of Biological Chemistry, 2011, 286, 4991-5002.	3.4	89
31	Poly(ADP-ribosyl)ation during chromatin remodeling steps in rat spermiogenesis. Chromosoma, 2005, 114, 67-74.	2.2	87
32	Inhibition of poly(ADP-ribosyl)ation by overexpressing the poly(ADP-ribose) polymerase DNA-binding domain in mammalian cells.. Journal of Biological Chemistry, 1990, 265, 18721-18724.	3.4	87
33	Very low concentrations of arsenite suppress poly(ADP-ribosyl)ation in mammalian cells. International Journal of Cancer, 2003, 104, 1-6.	5.1	85
34	Poly(ADP-ribosyl)ation accelerates DNA repair in a pathway dependent on Cockayne syndrome B protein. Nucleic Acids Research, 2003, 31, 5332-5337.	14.5	84
35	Immunolocalisation of PrP ^{Sc} in scrapie-infected N2a mouse neuroblastoma cells by light and electron microscopy. European Journal of Cell Biology, 2009, 88, 45-63.	3.6	84
36	Age and gender effects on DNA strand break repair in peripheral blood mononuclear cells. Aging Cell, 2013, 12, 58-66.	6.7	83

#	ARTICLE	IF	CITATIONS
37	Rapid regulation of telomere length is mediated by poly(ADP-ribose) polymerase-1. <i>Nucleic Acids Research</i> , 2008, 36, 6309-6317.	14.5	79
38	The C-terminal domain of p53 orchestrates the interplay between non-covalent and covalent poly(ADP-ribosyl)ation of p53 by PARP1. <i>Nucleic Acids Research</i> , 2018, 46, 804-822.	14.5	79
39	Tumorigenic conversion of immortal human skin keratinocytes (HaCaT) by elevated temperature. <i>Oncogene</i> , 1999, 18, 5638-5645.	5.9	78
40	Poly(ADP-ribose)ylation inhibitors: Promising drug candidates for a wide variety of pathophysiologic conditions. <i>International Journal of Cancer</i> , 2004, 111, 813-818.	5.1	78
41	Upregulation of miR-24 is associated with a decreased DNA damage response upon etoposide treatment in highly differentiated CD8 ⁺ T cells sensitizing them to apoptotic cell death. <i>Aging Cell</i> , 2012, 11, 579-587.	6.7	78
42	How to kill tumor cells with inhibitors of poly(ADP-ribose)ylation. <i>International Journal of Cancer</i> , 2011, 128, 251-265.	5.1	77
43	Genomic localization, sequence analysis, and transcription of the putative human cytomegalovirus DNA polymerase gene. <i>Journal of Virology</i> , 1987, 61, 119-124.	3.4	75
44	Inhibition of poly(ADP-ribosyl)ation by overexpressing the poly(ADP-ribose) polymerase DNA-binding domain in mammalian cells. <i>Journal of Biological Chemistry</i> , 1990, 265, 18721-4.	3.4	75
45	Selective Loss of Poly(ADP-ribose) and the 85-kDa Fragment of Poly(ADP-ribose) Polymerase in Nucleoli during Alkylation-induced Apoptosis of HeLa Cells. <i>Journal of Biological Chemistry</i> , 1999, 274, 32122-32126.	3.4	73
46	Pathophysiology of ageing, longevity and age related diseases. <i>Immunity and Ageing</i> , 2007, 4, 4.	4.2	69
47	Oxytocin modulates proliferation and stress responses of human skin cells: implications for atopic dermatitis. <i>Experimental Dermatology</i> , 2013, 22, 399-405.	2.9	69
48	PARP-1: A Regulator of Genomic Stability Linked with Mammalian Longevity. <i>ChemBioChem</i> , 2001, 2, 725.	2.6	66
49	Association of mitochondrial antioxidant enzymes with mitochondrial DNA as integral nucleoid constituents. <i>FASEB Journal</i> , 2009, 23, 2034-2044.	0.5	64
50	Multiparameter toxicity assessment of novel DOPO-derived organophosphorus flame retardants. <i>Archives of Toxicology</i> , 2017, 91, 407-425.	4.2	63
51	Negative regulation of alkylation-induced sister-chromatid exchange by poly(ADP-ribose) polymerase-1 activity. <i>International Journal of Cancer</i> , 2000, 88, 351-355.	5.1	62
52	Effects of Psychotherapy on DNA Strand Break Accumulation Originating from Traumatic Stress. <i>Psychotherapy and Psychosomatics</i> , 2014, 83, 289-297.	8.8	61
53	Validation of suitable internal control genes for expression studies in aging. <i>Mechanisms of Ageing and Development</i> , 2010, 131, 89-95.	4.6	60
54	Age-dependent expression of DNMT1 and DNMT3B in PBMCs from a large European population enrolled in the MARK-AGE study. <i>Aging Cell</i> , 2016, 15, 755-765.	6.7	60

#	ARTICLE	IF	CITATIONS
55	The emerging role of poly(ADP-ribose) polymerase-1 in longevity. <i>International Journal of Biochemistry and Cell Biology</i> , 2005, 37, 1043-1053.	2.8	59
56	Poly(ADP-ribose)-mediated interplay of XPA and PARP 1 leads to reciprocal regulation of protein function. <i>FEBS Journal</i> , 2014, 281, 3625-3641.	4.7	59
57	Multiparametric Staining to Identify Apoptotic Human Cells. <i>Experimental Cell Research</i> , 1997, 234, 174-177.	2.6	58
58	A modified and automated version of the 'Fluorimetric Detection of Alkaline DNA Unwinding' method to quantify formation and repair of DNA strand breaks. <i>BMC Biotechnology</i> , 2009, 9, 39.	3.3	58
59	Inflammatory and age-related pathologies in mice with ectopic expression of human PARP-1. <i>Mechanisms of Ageing and Development</i> , 2010, 131, 389-404.	4.6	57
60	New polymorphisms in the human poly(ADP-ribose) polymerase-1 coding sequence: lack of association with longevity or with increased cellular poly(ADP-ribosyl)ation capacity. <i>Journal of Molecular Medicine</i> , 2000, 78, 431-440.	3.9	56
61	Imidazoquinolinone, Imidazopyridine, and Isoquinolindione Derivatives as Novel and Potent Inhibitors of the Poly(ADP-ribose) Polymerase (PARP): A Comparison with Standard PARP Inhibitors. <i>Molecular Pharmacology</i> , 2008, 74, 1587-1598.	2.3	54
62	Comparative characterisation of poly(ADP-ribose) polymerase-1 from two mammalian species with different life span. <i>Experimental Gerontology</i> , 2000, 35, 989-1002.	2.8	52
63	Ageing and PARP. <i>Pharmacological Research</i> , 2005, 52, 93-99.	7.1	52
64	DNA repair and PARP in aging. <i>Free Radical Research</i> , 2006, 40, 1295-1302.	3.3	52
65	Quantification of Cellular Poly(ADP-ribosyl)ation by Stable Isotope Dilution Mass Spectrometry Reveals Tissue- and Drug-Dependent Stress Response Dynamics. <i>ACS Chemical Biology</i> , 2013, 8, 1567-1575.	3.4	50
66	Real-time monitoring of PARP1-dependent PARylation by ATR-FTIR spectroscopy. <i>Nature Communications</i> , 2020, 11, 2174.	12.8	50
67	Cell lines inducibly expressing the adeno-associated virus (AAV) rep gene: requirements for productive replication of rep-negative AAV mutants. <i>Journal of Virology</i> , 1994, 68, 7169-7177.	3.4	50
68	Enhancement of N-methyl-N'-nitro-N-nitrosoguanidine-induced DNA amplification in a Simian virus 40-transformed Chinese hamster cell line by 3-aminobenzamide. <i>Cancer Research</i> , 1987, 47, 3632-6.	0.9	50
69	High-Affinity Interaction of Poly(ADP-ribose) and the Human DEK Oncoprotein Depends upon Chain Length. <i>Biochemistry</i> , 2010, 49, 7119-7130.	2.5	49
70	Increase in the frequency of hepadnavirus DNA integrations by oxidative DNA damage and inhibition of DNA repair. <i>Journal of Virology</i> , 1997, 71, 5455-5463.	3.4	49
71	Inhibition of ATM blocks the etoposide-induced DNA damage response and apoptosis of resting human T cells. <i>DNA Repair</i> , 2012, 11, 864-873.	2.8	48
72	Plasma Carotenoids, Tocopherols, and Retinol in the Age-Stratified (35-74 Years) General Population: A Cross-Sectional Study in Six European Countries. <i>Nutrients</i> , 2016, 8, 614.	4.1	48

#	ARTICLE	IF	CITATIONS
73	Self-rated health in individuals with and without disease is associated with multiple biomarkers representing multiple biological domains. <i>Scientific Reports</i> , 2021, 11, 6139.	3.3	48
74	Human cytomegalovirus induces JC virus DNA replication in human fibroblasts. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1993, 90, 11406-11410.	7.1	47
75	PARP1 catalytic variants reveal branching and chain length-specific functions of poly(ADP-ribose) in cellular physiology and stress response. <i>Nucleic Acids Research</i> , 2020, 48, 10015-10033.	14.5	47
76	Overexpression of Human poly(ADP-Ribose) Polymerase in Transfected Hamster Cells Leads to Increased Poly(ADP-Ribosyl)ation and Cellular Sensitization to gamma irradiation. <i>FEBS Journal</i> , 1997, 244, 15-20.	0.2	46
77	Immunodot Blot Method for the Detection of Poly(ADP-ribose) Synthesized in Vitro and in Vivo. <i>Analytical Biochemistry</i> , 1998, 259, 280-283.	2.4	45
78	Role of poly(ADP-ribose) polymerase in sulfur mustard toxicity. <i>Toxicology</i> , 2009, 263, 20-25.	4.2	45
79	Toxicological properties of the thiolated inorganic arsenic and arsenosugar metabolite thio-dimethylarsinic acid in human bladder cells. <i>Journal of Trace Elements in Medicine and Biology</i> , 2014, 28, 138-146.	3.0	45
80	MARK-AGE standard operating procedures (SOPs): A successful effort. <i>Mechanisms of Ageing and Development</i> , 2015, 151, 18-25.	4.6	45
81	Mechanisms of Hg species induced toxicity in cultured human astrocytes: genotoxicity and DNA-damage response. <i>Metallomics</i> , 2014, 6, 662-671.	2.4	44
82	Transient DNA damage following exposure to gold nanoparticles. <i>Nanoscale</i> , 2018, 10, 15723-15735.	5.6	44
83	Poly(ADP-ribose) polymerase-1 is a survival factor for radiation-exposed intestinal epithelial stem cells in vivo. <i>Nucleic Acids Research</i> , 2003, 31, 6198-6205.	14.5	43
84	Prevention of the degeneration of human dopaminergic neurons in an astrocyte co-culture system allowing endogenous drug metabolism. <i>British Journal of Pharmacology</i> , 2015, 172, 4119-4132.	5.4	43
85	Trans-dominant inhibition of poly(ADP-ribosyl)ation potentiates carcinogen induced gene amplification in SV40-transformed Chinese hamster cells. <i>Cancer Research</i> , 1996, 56, 2715-7.	0.9	43
86	The automated FADU-assay, a potential high-throughput in vitro method for early screening of DNA breakage. <i>ALTEX: Alternatives To Animal Experimentation</i> , 2011, 28, 295-303.	1.5	42
87	Direct stimulation of poly(ADP ribose) polymerase in permeabilized cells by double-stranded DNA oligomers. <i>Analytical Biochemistry</i> , 1991, 193, 236-239.	2.4	41
88	Poly(ADP-ribosyl)ation: a posttranslational protein modification linked with genome protection and mammalian longevity. , 2000, 1, 41-46.		41
89	Site-Specific Noncovalent Interaction of the Biopolymer Poly(ADP-ribose) with the Werner Syndrome Protein Regulates Protein Functions. <i>ACS Chemical Biology</i> , 2013, 8, 179-188.	3.4	41
90	Gender- and age-dependencies of oxidative stress, as detected based on the steady state concentrations of different biomarkers in the MARK-AGE study. <i>Redox Biology</i> , 2019, 24, 101204.	9.0	41

#	ARTICLE	IF	CITATIONS
91	Mechanisms of ageing. <i>Eye</i> , 2001, 15, 371-375.	2.1	40
92	Induction of DNA strand breaks by dental composite components compared to X-ray exposure in human gingival fibroblasts. <i>Archives of Toxicology</i> , 2011, 85, 143-148.	4.2	40
93	Recalcitrant pharmaceuticals in the aquatic environment: a comparative screening study of their occurrence, formation of phototransformation products and their in vitro toxicity. <i>Environmental Chemistry</i> , 2014, 11, 431.	1.5	40
94	Poly(ADP-ribose) polymerase (PARP-1) and p53 independently function in regulating double-strand break repair in primate cells. <i>Nucleic Acids Research</i> , 2004, 32, 669-680.	14.5	38
95	High-level expression of adeno-associated virus (AAV) Rep78 or Rep68 protein is sufficient for infectious-particle formation by a rep-negative AAV mutant. <i>Journal of Virology</i> , 1995, 69, 6880-6885.	3.4	38
96	Defective mitochondrial respiration, altered dNTP pools and reduced AP endonuclease 1 activity in peripheral blood mononuclear cells of Alzheimer's disease patients. <i>Aging</i> , 2015, 7, 793-810.	3.1	38
97	Mechanistic aspects of the cytotoxic activity of glufosfamide, a new tumour therapeutic agent. <i>British Journal of Cancer</i> , 2000, 82, 629-634.	6.4	37
98	N-glycosylation profiling of plasma provides evidence for accelerated physiological aging in post-traumatic stress disorder. <i>Translational Psychiatry</i> , 2013, 3, e320-e320.	4.8	37
99	High-Resolution Quantitative Metabolome Analysis of Urine by Automated Flow Injection NMR. <i>Analytical Chemistry</i> , 2013, 85, 5801-5809.	6.5	36
100	Analysis of the machinery and intermediates of the 5hmC-mediated DNA demethylation pathway in aging on samples from the MARK-AGE Study. <i>Aging</i> , 2016, 8, 1896-1922.	3.1	36
101	Poly(ADP-ribosyl)ation and aging. <i>Experimental Gerontology</i> , 2004, 39, 1599-1601.	2.8	35
102	Molecular mechanisms of Mn induced neurotoxicity: <sc>RONS</sc> generation, genotoxicity, and <sc>DNA</sc>-damage response. <i>Molecular Nutrition and Food Research</i> , 2013, 57, 1255-1269.	3.3	34
103	Associations between Specific Redox Biomarkers and Age in a Large European Cohort: The MARK-AGE Project. <i>Oxidative Medicine and Cellular Longevity</i> , 2017, 2017, 1-12.	4.0	34
104	Aging of different avian cultured cells: Lack of ROS-induced damage and quality control mechanisms. <i>Mechanisms of Ageing and Development</i> , 2010, 131, 48-59.	4.6	33
105	Potential of carcinogen-induced methotrexate resistance and dihydrofolate reductase gene amplification by inhibitors of poly(adenosine diphosphate-ribose) polymerase. <i>Cancer Research</i> , 1990, 50, 5756-60.	0.9	33
106	Reduced poly(ADP-ribosyl)ation in lymphocytes of laryngeal cancer patients: Results of a case-control study. <i>International Journal of Cancer</i> , 2002, 98, 780-784.	5.1	32
107	Effect of zinc on cellular poly(ADP-ribosyl)ation capacity. <i>Experimental Gerontology</i> , 2008, 43, 409-414.	2.8	31
108	Up-regulation of cathepsin B and cathepsin L activities in scrapie-infected mouse Neuro2a cells. <i>Journal of General Virology</i> , 2003, 84, 2279-2283.	2.9	31

#	ARTICLE	IF	CITATIONS
109	Role of poly(ADP-ribosyl)ation in DNA-PKcs- independent V(D)J recombination. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 4532-4537.	7.1	30
110	Enzyme characteristics of recombinant poly(ADP-ribose) polymerases-1 of rat and human origin mirror the correlation between cellular poly(ADP-ribosyl)ation capacity and species-specific life span. Mechanisms of Ageing and Development, 2010, 131, 366-369.	4.6	30
111	DNA damage-independent apoptosis induced by curcumin in normal resting human T cells and leukaemic Jurkat cells. Mutagenesis, 2013, 28, 411-416.	2.6	30
112	MARK-AGE population: From the human model to new insights. Mechanisms of Ageing and Development, 2015, 151, 13-17.	4.6	29
113	Sulfur and nitrogen mustards induce characteristic poly(ADP-ribosyl)ation responses in HaCaT keratinocytes with distinctive cellular consequences. Toxicology Letters, 2016, 244, 56-71.	0.8	29
114	Antioxidants linked with physical, cognitive and psychological frailty: Analysis of candidate biomarkers and markers derived from the MARK-AGE study. Mechanisms of Ageing and Development, 2019, 177, 135-143.	4.6	29
115	Detection of poly(ADP-ribose) polymerase and its reaction product poly(ADP-ribose) by immunocytochemistry. The Histochemical Journal, 1996, 28, 391-395.	0.6	28
116	Kinetics of poly(ADP-ribosyl)ation, but not PARP1 itself, determines the cell fate in response to DNA damage in vitro and in vivo. Nucleic Acids Research, 2017, 45, 11174-11192.	14.5	28
117	Microbiome in Blood Samples From the General Population Recruited in the MARK-AGE Project: A Pilot Study. Frontiers in Microbiology, 2021, 12, 707515.	3.5	27
118	Chromatin Composition Is Changed by Poly(ADP-ribosyl)ation during Chromatin Immunoprecipitation. PLoS ONE, 2012, 7, e32914.	2.5	27
119	Structural chromosome abnormalities, increased DNA strand breaks and DNA strand break repair deficiency in dermal fibroblasts from old female human donors. Aging, 2015, 7, 110-122.	3.1	27
120	Ex vivo supplementation with nicotinic acid enhances cellular poly(ADP-ribosyl)ation and improves cell viability in human peripheral blood mononuclear cells. Biochemical Pharmacology, 2010, 80, 1103-1112.	4.4	26
121	The NAD + precursor nicotinic acid improves genomic integrity in human peripheral blood mononuclear cells after X-irradiation. DNA Repair, 2017, 52, 12-23.	2.8	26
122	Prion Protein in Milk. PLoS ONE, 2006, 1, e71.	2.5	26
123	Overexpression of dominant negative PARP interferes with tumor formation of HeLa cells in nude mice: Evidence for increased tumor cell apoptosis in vivo. Oncogene, 1999, 18, 7010-7015.	5.9	25
124	DNA Damage in Nijmegen Breakage Syndrome Cells Leads to PARP Hyperactivation and Increased Oxidative Stress. PLoS Genetics, 2012, 8, e1002557.	3.5	25
125	Poly(ADP-RIBOSE) polymerase-1 (Parp-1) antagonizes topoisomerase I-dependent recombination stimulation by P53. Nucleic Acids Research, 2006, 34, 1036-1049.	14.5	24
126	High-throughput analysis of DNA interstrand crosslinks in human peripheral blood mononuclear cells by automated reverse FADU assay. Toxicology, 2011, 280, 53-60.	4.2	24

#	ARTICLE	IF	CITATIONS
127	PARP1 regulates DNA damage-induced nucleolar-nucleoplasmic shuttling of WRN and XRCC1 in a toxicant and protein-specific manner. <i>Scientific Reports</i> , 2019, 9, 10075.	3.3	24
128	A mass spectrometric platform for the quantitation of sulfur mustard-induced nucleic acid adducts as mechanistically relevant biomarkers of exposure. <i>Archives of Toxicology</i> , 2019, 93, 61-79.	4.2	24
129	l-Selegiline Potentiates the Cellular Poly(ADP-Ribosyl)ation Response to Ionizing Radiation. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2003, 306, 973-979.	2.5	23
130	Analyzing structure–function relationships of artificial and cancer-associated PARP1 variants by reconstituting TALEN-generated HeLa PARP1 knock-out cells. <i>Nucleic Acids Research</i> , 2016, 44, gkw859.	14.5	23
131	The Role of Norepinephrine and β -Adrenergic Receptors in Acute Stress-Induced Changes in Granulocytes and Monocytes. <i>Psychosomatic Medicine</i> , 2018, 80, 649-658.	2.0	23
132	Antibiotics and sweeteners in the aquatic environment: biodegradability, formation of phototransformation products, and in vitro toxicity. <i>Environmental Science and Pollution Research</i> , 2015, 22, 18017-18030.	5.3	22
133	Associations of subjective vitality with <scp>DNA</scp> damage, cardiovascular risk factors and physical performance. <i>Acta Physiologica</i> , 2015, 213, 156-170.	3.8	22
134	Alterations of the serum N-glycan profile in female patients with Major Depressive Disorder. <i>Journal of Affective Disorders</i> , 2018, 234, 139-147.	4.1	22
135	New polymorphisms in the human poly(ADP-ribose) polymerase-1 coding sequence: lack of association with longevity or with increased cellular poly(ADP-ribosyl)ation capacity. <i>Journal of Molecular Medicine</i> , 2000, 78, 431-440.	3.9	21
136	Poly(ADP-ribose) polymerase, Genomic Instability, and Longevity. <i>Annals of the New York Academy of Sciences</i> , 2000, 908, 126-132.	3.8	21
137	The degree of radiation-induced DNA strand breaks is altered by acute sleep deprivation and psychological stress and is associated with cognitive performance in humans. <i>Sleep</i> , 2018, 41, .	1.1	21
138	The role of poly(ADP-ribose) polymerases in manganese exposed <i>Caenorhabditis elegans</i> . <i>Journal of Trace Elements in Medicine and Biology</i> , 2020, 57, 21-27.	3.0	21
139	Flow-cytometric assessment of cellular poly(ADP-ribosyl)ation capacity in peripheral blood lymphocytes. <i>Immunity and Ageing</i> , 2006, 3, 8.	4.2	20
140	The MARK-AGE phenotypic database: Structure and strategy. <i>Mechanisms of Ageing and Development</i> , 2015, 151, 26-30.	4.6	20
141	Protection against Tetanus and Diphtheria in Europe: The impact of age, gender and country of origin based on data from the MARK-AGE Study. <i>Experimental Gerontology</i> , 2018, 105, 109-112.	2.8	20
142	Interactions of p53 with poly(ADP-ribose) and DNA induce distinct changes in protein structure as revealed by ATR-FTIR spectroscopy. <i>Nucleic Acids Research</i> , 2019, 47, 4843-4858.	14.5	20
143	Molecular consequences of psychological stress in human aging. <i>Experimental Gerontology</i> , 2015, 68, 39-42.	2.8	19
144	Mass spectrometric analysis of sulfur mustard-induced biomolecular adducts: Are DNA adducts suitable biomarkers of exposure?. <i>Toxicology Letters</i> , 2018, 293, 21-30.	0.8	19

#	ARTICLE	IF	CITATIONS
145	Influence of Acute Exercise on DNA Repair and PARP Activity before and after Irradiation in Lymphocytes from Trained and Untrained Individuals. <i>International Journal of Molecular Sciences</i> , 2019, 20, 2999.	4.1	19
146	Poly(ADP-Ribosyl)ation, PARP, and Aging. <i>Science of Aging Knowledge Environment: SAGE KE</i> , 2004, re9-re9.	0.8	19
147	Molecular genetic systems to study the role of poly(ADP-ribose) in the cellular response to DNA damage. <i>Biochimie</i> , 1995, 77, 450-455.	2.6	17
148	Synergistic Effects of Weightlessness, Isoproterenol, and Radiation on DNA Damage Response and Cytokine Production in Immune Cells. <i>International Journal of Molecular Sciences</i> , 2018, 19, 3689.	4.1	17
149	Detection of poly(ADP-ribose) synthesis in <i>Drosophila</i> testes upon γ -irradiation. <i>Chromosoma</i> , 1999, 108, 44-51.	2.2	16
150	DNA Hydroxymethylation Levels Are Altered in Blood Cells From Down Syndrome Persons Enrolled in the MARK-AGE Project. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2018, 73, 737-744.	3.6	16
151	Cardiorespiratory and Neuromuscular Demand of Daily Centrifugation: Results From the 60-Day AGBRESA Bed Rest Study. <i>Frontiers in Physiology</i> , 2020, 11, 562377.	2.8	16
152	Exploring Flow Cytometry-Based Micronucleus Scoring for Reliable Nanomaterial Genotoxicity Assessment. <i>Chemical Research in Toxicology</i> , 2020, 33, 2538-2549.	3.3	16
153	Poly(ADP-ribose) immunostaining to detect apoptosis induced by a neurotoxic fragment of prion protein. <i>The Histochemical Journal</i> , 1999, 31, 711-716.	0.6	15
154	Title is missing!. <i>Molecular and Cellular Biochemistry</i> , 1999, 193, 31-35.	3.1	15
155	Quantitative Nonisotopic Immuno-Dot-Blot Method for the Assessment of Cellular Poly(ADP-ribose)ation Capacity. <i>Analytical Biochemistry</i> , 1999, 275, 118-122.	2.4	15
156	Poly(ADP-ribose) polymerase-1, DNA repair and mammalian longevity. <i>Experimental Gerontology</i> , 2002, 37, 1203-1205.	2.8	15
157	Genetic and environmental influence on DNA strand break repair: A twin study. <i>Environmental and Molecular Mutagenesis</i> , 2013, 54, 414-420.	2.2	15
158	Stress Hormone-Mediated DNA Damage Response -- Implications for Cellular Senescence and Tumour Progression. <i>Current Drug Targets</i> , 2016, 17, 398-404.	2.1	15
159	Functional overexpression of human poly(ADP-ribose) polymerase in transfected rat tumor cells. <i>Carcinogenesis</i> , 1997, 18, 663-668.	2.8	14
160	Poly(ADP-ribose) polymerase and aging. <i>Experimental Gerontology</i> , 1998, 33, 519-523.	2.8	14
161	An automated Fpg-based FADU method for the detection of oxidative DNA lesions and screening of antioxidants. <i>Toxicology</i> , 2013, 310, 15-21.	4.2	14
162	Quality control data of physiological and immunological biomarkers measured in serum and plasma. <i>Mechanisms of Ageing and Development</i> , 2015, 151, 54-59.	4.6	14

#	ARTICLE	IF	CITATIONS
163	The octarepeat region of prion protein, but not the TM1 domain, is important for the antioxidant effect of prion protein. <i>Free Radical Biology and Medicine</i> , 2008, 45, 1622-1630.	2.9	13
164	Zinc and ageing (ZINCAGE Project). <i>Experimental Gerontology</i> , 2008, 43, 361-362.	2.8	13
165	Quantitation of Poly(ADP-Ribose) by Isotope Dilution Mass Spectrometry. <i>Methods in Molecular Biology</i> , 2017, 1608, 3-18.	0.9	13
166	A combined approach of surface passivation and specific immobilization to study biomolecules by ATR-FTIR spectroscopy. <i>Biomedical Spectroscopy and Imaging</i> , 2018, 7, 25-33.	1.2	13
167	Zinc-Induced Metallothionein in Centenarian Offspring From a Large European Population: The MARK-AGE Project. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2018, 73, 745-753.	3.6	13
168	Prevalence and Loads of Torquetenovirus in the European MARK-AGE Study Population. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2020, 75, 1838-1845.	3.6	13
169	A caveat in mouse genetic engineering: ectopic gene targeting in ES cells by bidirectional extension of the homology arms of a gene replacement vector carrying human PARP-1. <i>Transgenic Research</i> , 2009, 18, 261-279.	2.4	12
170	Age, Sex, and BMI Influence on Copper, Zinc, and Their Major Serum Carrier Proteins in a Large European Population Including Nonagenarian Offspring From MARK-AGE Study. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2021, 76, 2097-2106.	3.6	12
171	The Comorbidity in Relation to AIDS (COBRA) cohort: Design, methods and participant characteristics. <i>PLoS ONE</i> , 2018, 13, e0191791.	2.5	12
172	Poly(ADP-Ribosyl)ation. , 2006, , .		11
173	Genetic heterogeneity versus molecular analysis of prion susceptibility in neuroblastoma N2a sublines. <i>Archives of Virology</i> , 2008, 153, 1693-1702.	2.1	11
174	The Role of Nibrin in Doxorubicin-Induced Apoptosis and Cell Senescence in Nijmegen Breakage Syndrome Patients Lymphocytes. <i>PLoS ONE</i> , 2014, 9, e104964.	2.5	11
175	MARK-AGE data management: Cleaning, exploration and visualization of data. <i>Mechanisms of Ageing and Development</i> , 2015, 151, 38-44.	4.6	11
176	Differential cytotoxicity induced by the Titanium(IV)Salan complex Tc52 in G2-phase independent of DNA damage. <i>BMC Cancer</i> , 2016, 16, 469.	2.6	11
177	Impaired PARP activity in response to the β_2 -adrenergic receptor agonist isoproterenol. <i>Toxicology in Vitro</i> , 2018, 50, 29-39.	2.4	11
178	PARP1 protects from benzo[a]pyrene diol epoxide-induced replication stress and mutagenicity. <i>Archives of Toxicology</i> , 2018, 92, 1323-1340.	4.2	11
179	Poly(ADP-ribosyl)ation: its role in inducible DNA amplification, and its correlation with the longevity of mammalian species. <i>Experimental and Clinical Immunogenetics</i> , 1992, 9, 230-40.	1.2	11
180	Fueling genome maintenance: On the versatile roles of NAD ⁺ in preserving DNA integrity. <i>Journal of Biological Chemistry</i> , 2022, 298, 102037.	3.4	11

#	ARTICLE	IF	CITATIONS
181	NAD ⁺ in sulfur mustard toxicity. <i>Toxicology Letters</i> , 2020, 324, 95-103.	0.8	10
182	Procaine—The Controversial Geroprotector Candidate: New Insights Regarding Its Molecular and Cellular Effects. <i>Oxidative Medicine and Cellular Longevity</i> , 2021, 2021, 1-18.	4.0	10
183	Non-nucleoside reverse transcriptase inhibitor-based combination antiretroviral therapy is associated with lower cell-associated HIV RNA and DNA levels compared to protease inhibitor-based therapy. <i>ELife</i> , 2021, 10, .	6.0	10
184	In memoriam Bernard Strehler—genomic instability in ageing: a persistent challenge. <i>Mechanisms of Ageing and Development</i> , 2002, 123, 899-906.	4.6	9
185	Mathematical modelling of the automated FADU assay for the quantification of DNA strand breaks and their repair in human peripheral mononuclear blood cells. <i>BMC Biophysics</i> , 2014, 7, 9.	4.4	9
186	The oncoprotein DEK affects the outcome of PARP1/2 inhibition during mild replication stress. <i>PLoS ONE</i> , 2019, 14, e0213130.	2.5	9
187	Assessing Genotoxicity of Ten Different Engineered Nanomaterials by the Novel Semi-Automated FADU Assay and the Alkaline Comet Assay. <i>Nanomaterials</i> , 2022, 12, 220.	4.1	9
188	Microdeletions within the hydrophobic core region of cellular prion protein alter its topology and metabolism. <i>Biochemical and Biophysical Research Communications</i> , 2010, 393, 439-444.	2.1	8
189	Cell cycle—dependent cytotoxicity and mitotic spindle checkpoint dependency of investigational and approved antimetabolic agents. <i>International Journal of Cancer</i> , 2012, 130, 798-807.	5.1	7
190	Toxicology: a discipline in need of academic anchoring—the point of view of the German Society of Toxicology. <i>Archives of Toxicology</i> , 2015, 89, 1881-1893.	4.2	7
191	Immunochemical analysis of poly(ADP-ribosyl)ation in HaCaT keratinocytes induced by the mono-alkylating agent 2-chloroethyl ethyl sulfide (CEES): Impact of experimental conditions. <i>Toxicology Letters</i> , 2016, 244, 72-80.	0.8	7
192	Toxicity of ionizing radiation (IR) in a human induced pluripotent stem cell (hiPSC)-derived 3D early neurodevelopmental model. <i>Archives of Toxicology</i> , 2019, 93, 2879-2893.	4.2	7
193	The burden of overweight: Higher body mass index, but not vital exhaustion, is associated with higher DNA damage and lower DNA repair capacity. <i>DNA Repair</i> , 2022, 114, 103323.	2.8	7
194	DNA Methylation Analysis of Ribosomal DNA in Adults With Down Syndrome. <i>Frontiers in Genetics</i> , 2022, 13, 792165.	2.3	7
195	Quantitative assessment of bleomycin-induced poly(ADP-ribosyl)ation in human lymphocytes by immunofluorescence and image analysis. <i>Journal of Immunological Methods</i> , 2000, 244, 145-151.	1.4	6
196	Editorial. <i>Mechanisms of Ageing and Development</i> , 2015, 151, 1.	4.6	6
197	The Radioprotective Effect of Procaine and Procaine-Derived Product Gerovital H3 in Lymphocytes from Young and Aged Individuals. <i>Oxidative Medicine and Cellular Longevity</i> , 2020, 2020, 1-10.	4.0	6
198	Genomic structure, conservation and FISH mapping of the <i>Rattus norvegicus</i> <i>Adprt</i> gene. <i>Cytogenetic and Genome Research</i> , 2002, 98, 298-301.	1.1	5

#	ARTICLE	IF	CITATIONS
199	Rapamycin inhibits poly(ADP-ribosyl)ation in intact cells. <i>Biochemical and Biophysical Research Communications</i> , 2009, 386, 232-236.	2.1	5
200	Quantitative analysis of WRN exonuclease activity by isotope dilution mass spectrometry. <i>Mechanisms of Ageing and Development</i> , 2012, 133, 575-579.	4.6	5
201	Epigenetic and redox biomarkers: Novel insights from the MARK-AGE study. <i>Mechanisms of Ageing and Development</i> , 2019, 177, 128-134.	4.6	5
202	Nutritional Factors Modulating Alu Methylation in an Italian Sample from The Mark-Age Study Including Offspring of Healthy Nonagenarians. <i>Nutrients</i> , 2019, 11, 2986.	4.1	5
203	Chronic senescent human mesenchymal stem cells as possible contributor to the wound healing disorder after exposure to the alkylating agent sulfur mustard. <i>Archives of Toxicology</i> , 2021, 95, 727-747.	4.2	5
204	Automated screening for oxidative or methylation-induced DNA damage in human cells. <i>ALTEX: Alternatives To Animal Experimentation</i> , 2021, 38, 63-72.	1.5	5
205	Inhibition of carcinogen-inducible DNA amplification in a simian virus 40-transformed hamster cell line by ethacridine or ethanol. <i>Cancer Research</i> , 1989, 49, 2584-7.	0.9	5
206	In-situ analysis of cellular poly(ADP-ribose) production in scrapie-infected mouse neuroblastoma cells. <i>The Histochemical Journal</i> , 2002, 34, 357-363.	0.6	4
207	The MARK-AGE extended database: data integration and pre-processing. <i>Mechanisms of Ageing and Development</i> , 2015, 151, 31-37.	4.6	4
208	Medication Intake Is Associated with Lower Plasma Carotenoids and Higher Fat-Soluble Vitamins in the Cross-Sectional MARK-AGE Study in Older Individuals. <i>Journal of Clinical Medicine</i> , 2020, 9, 2072.	2.4	4
209	Mitochondria are devoid of poly(ADP-ribose)polymerase-1, but harbor its product oligo(ADP-ribose). <i>Journal of Cellular Biochemistry</i> , 2021, 122, 507-523.	2.6	4
210	Ageing affects subtelomeric DNA methylation in blood cells from a large European population enrolled in the MARK-AGE study. <i>GeroScience</i> , 2021, 43, 1283-1302.	4.6	4
211	Age-related activity of Poly (ADP-Ribose) Polymerase (PARP) in men with localized prostate cancer. <i>Mechanisms of Ageing and Development</i> , 2021, 196, 111494.	4.6	4
212	Do low molecular weight antioxidants contribute to the Protection against oxidative damage? The interrelation between oxidative stress and low molecular weight antioxidants based on data from the MARK-AGE study. <i>Archives of Biochemistry and Biophysics</i> , 2021, 713, 109061.	3.0	4
213	Trans-dominant inhibition of poly(ADP-ribosyl)ation potentiates alkylation-induced shuttle-vector mutagenesis in Chinese hamster cells. <i>Molecular and Cellular Biochemistry</i> , 1999, 193, 31-5.	3.1	4
214	Blood circulating miR-28-5p and let-7d-5p associate with premature ageing in Down syndrome. <i>Mechanisms of Ageing and Development</i> , 2022, 206, 111691.	4.6	4
215	Statistical strategies and stochastic predictive models for the MARK-AGE data. <i>Mechanisms of Ageing and Development</i> , 2015, 151, 45-53.	4.6	3
216	In memoriam Olivier Toussaint – Stress-induced premature senescence and the role of DNA damage. <i>Mechanisms of Ageing and Development</i> , 2018, 170, 10-12.	4.6	3

#	ARTICLE	IF	CITATIONS
217	NAD ⁺ loading of mammalian cells by electrotransfection leads to increased poly(ADP-ribosyl)ation capacity. <i>Biochimie</i> , 1997, 79, 175-178.	2.6	1
218	Multitasking Roles for Poly(ADP-ribosyl)ation in Aging and Longevity. <i>Cancer Drug Discovery and Development</i> , 2015, , 125-179.	0.4	1
219	SENS and the Polarization of Aging-Related Research. <i>Science of Aging Knowledge Environment: SAGE KE</i> , 2006, 2006, pe8-pe8.	0.8	1
220	Culture medium-dependent isoproterenol stability and its impact on DNA strand breaks formation and repair. <i>Chemico-Biological Interactions</i> , 2022, 357, 109877.	4.0	1
221	Functional interactions of WRN with PARP1 and poly(ADP-ribose). <i>Experimental Gerontology</i> , 2017, 94, 119-120.	2.8	0
222	Poly(ADP-Ribosyl)ation. , 2015, , 1-6.		0
223	Poly(ADP-Ribosyl)ation. , 2016, , 3631-3636.		0
224	Association between fat-soluble vitamins and self-reported health status: a cross-sectional analysis of the MARK-AGE cohort. <i>British Journal of Nutrition</i> , 2022, 128, 433-443.	2.3	0
225	DNA Damage and Radiosensitivity in Blood Cells from Subjects Undergoing 45 Days of Isolation and Confinement: An Explorative Study. <i>Current Issues in Molecular Biology</i> , 2022, 44, 654-669.	2.4	0