

# David M Wilson

## List of Publications by Year in descending order

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174  
papers

13,102  
citations

17440

63  
h-index

27406

106  
g-index

175  
all docs

175  
docs citations

175  
times ranked

12076  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | DNA repair mechanisms in dividing and non-dividing cells. DNA Repair, 2013, 12, 620-636.   | 2.8  | 560       |
| 2  | The major human abasic endonuclease: formation, consequences and repair of abasic lesions in DNA. Mutation Research DNA Repair, 2001, 485, 283-307.  | 3.7  | 349       |
| 3  | Interaction of human apurinic endonuclease and DNA polymerase $\beta$ in the base excision repair pathway. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 7166-7169.   | 7.1  | 344       |
| 4  | A High-Fat Diet and NAD + Activate Sirt1 to Rescue Premature Aging in Cockayne Syndrome. Cell Metabolism, 2014, 20, 840-855.   | 16.2 | 306       |
| 5  | The mechanics of base excision repair, and its relationship to aging and disease. DNA Repair, 2007, 6, 544-559.  | 2.8  | 280       |
| 6  | Protecting the mitochondrial powerhouse. Trends in Cell Biology, 2015, 25, 158-170.  | 7.9  | 260       |
| 7  | Overview of Base Excision Repair Biochemistry. Current Molecular Pharmacology, 2012, 5, 3-13.  | 1.5  | 253       |
| 8  | Incision Activity of Human Apurinic Endonuclease (Ape) at Abasic Site Analogs in DNA. Journal of Biological Chemistry, 1995, 270, 16002-16007.   | 3.4  | 252       |
| 9  | Oxidative damage in telomeric DNA disrupts recognition by TRF1 and TRF2. Nucleic Acids Research, 2005, 33, 1230-1239.  | 14.5 | 237       |
| 10 | The Werner syndrome protein operates in base excision repair and cooperates with DNA polymerase $\beta$ . Nucleic Acids Research, 2006, 34, 745-754.   | 14.5 | 228       |
| 11 | Molecular mechanisms of sister-chromatid exchange. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2007, 616, 11-23.  | 1.0  | 228       |
| 12 | Life without DNA repair. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 12754-12757.   | 7.1  | 219       |
| 13 | Human Apurinic/Apyrimidinic Endonuclease 1. Antioxidants and Redox Signaling, 2014, 20, 678-707.   | 5.4  | 211       |
| 14 | Functional characterization of Ape1 variants identified in the human population. Nucleic Acids Research, 2000, 28, 3871-3879.  | 14.5 | 207       |
| 15 | Participation of DNA repair in the response to 5-fluorouracil. Cellular and Molecular Life Sciences, 2009, 66, 788-799.  | 5.4  | 200       |
| 16 | Removal of Oxidative DNA Damage via FEN1-Dependent Long-Patch Base Excision Repair in Human Cell Mitochondria. Molecular and Cellular Biology, 2008, 28, 4975-4987.  | 2.3  | 192       |
| 17 | Urea Cycle Dysregulation Generates Clinically Relevant Genomic and Biochemical Signatures. Cell, 2018, 174, 1559-1570.e22.   | 28.9 | 183       |
| 18 | Challenges and complexities in estimating both the functional impact and the disease risk associated with the extensive genetic variation in human DNA repair genes. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2003, 526, 93-125. | 1.0  | 179       |

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|----|---|------|-----------|
| 19 | Coordination of DNA single strand break repair. <i>Free Radical Biology and Medicine</i> , 2017, 107, 228-244.  | 2.9  | 179       |
| 20 | Cockayne syndrome group B protein prevents the accumulation of damaged mitochondria by promoting mitochondrial autophagy. <i>Journal of Experimental Medicine</i> , 2012, 209, 855-869.   | 8.5  | 177       |
| 21 | Two divalent metal ions in the active site of a new crystal form of human apurinic/apyrimidinic endonuclease, ape1: implications for the catalytic mechanism 1 Edited by I. A. Wilson. <i>Journal of Molecular Biology</i> , 2001, 307, 1023-1034.  | 4.2  | 173       |
| 22 | XRCC1 co-localizes and physically interacts with PCNA. <i>Nucleic Acids Research</i> , 2004, 32, 2193-2201.   | 14.5 | 172       |
| 23 | 3'-Phosphodiesterase activity of human apurinic/apyrimidinic endonuclease at DNA double-strand break ends. <i>Nucleic Acids Research</i> , 1997, 25, 2495-2500.   | 14.5 | 160       |
| 24 | The RAD2 Domain of Human Exonuclease 1 Exhibits 5' to 3' Exonuclease and Flap Structure-specific Endonuclease Activities. <i>Journal of Biological Chemistry</i> , 1999, 274, 37763-37769.  | 3.4  | 160       |
| 25 | DNA Damage and Associated DNA Repair Defects in Disease and Premature Aging. <i>American Journal of Human Genetics</i> , 2019, 105, 237-257.  | 6.2  | 143       |
| 26 | Processing of bistranded abasic DNA clusters in $\gamma$ -irradiated human hematopoietic cells. <i>Nucleic Acids Research</i> , 2004, 32, 5609-5620.  | 14.5 | 127       |
| 27 | Protein-protein interactions and posttranslational modifications in mammalian base excision repair. <i>Free Radical Biology and Medicine</i> , 2005, 38, 1121-1138.   | 2.9  | 126       |
| 28 | Stoichiometry of Base Excision Repair Proteins Correlates with Increased Somatic CAG Instability in Striatum over Cerebellum in Huntington's Disease Transgenic Mice. <i>PLoS Genetics</i> , 2009, 5, e1000749.   | 3.5  | 124       |
| 29 | Cockayne syndrome group B protein promotes mitochondrial DNA stability by supporting the DNA repair association with the mitochondrial membrane. <i>FASEB Journal</i> , 2010, 24, 2334-2346.  | 0.5  | 124       |
| 30 | Determinants in nuclease specificity of ape1 and ape2, human homologues of Escherichia coli exonuclease III. <i>Journal of Molecular Biology</i> , 2002, 316, 853-866.  | 4.2  | 122       |
| 31 | Pathways for repairing and tolerating the spectrum of oxidative DNA lesions. <i>Cancer Letters</i> , 2012, 327, 61-72.  | 7.2  | 118       |
| 32 | Repair mechanisms for oxidative DNA damage. <i>Frontiers in Bioscience - Landmark</i> , 2003, 8, d963-981.  | 3.0  | 117       |
| 33 | The role of Mg <sup>2+</sup> and specific amino acid residues in the catalytic reaction of the major human abasic endonuclease: new insights from EDTA-resistant incision of acyclic abasic site analogs and site-directed mutagenesis. <i>Journal of Molecular Biology</i> , 1999, 290, 447-457. | 4.2  | 113       |
| 34 | DNA polymerase $\beta$ deficiency leads to neurodegeneration and exacerbates Alzheimer disease phenotypes. <i>Nucleic Acids Research</i> , 2015, 43, 943-959.   | 14.5 | 110       |
| 35 | Genomic and protein expression analysis reveals flap endonuclease 1 (FEN1) as a key biomarker in breast and ovarian cancer. <i>Molecular Oncology</i> , 2014, 8, 1326-1338.   | 4.6  | 109       |
| 36 | Characterization of Abasic Endonuclease Activity of Human Ape1 on Alternative Substrates, as Well as Effects of ATP and Sequence Context on AP Site Incision. <i>Journal of Molecular Biology</i> , 2008, 379, 17-27.   | 4.2  | 106       |

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|----|---|------|-----------|
| 37 | Uracil residues dependent on the deaminase AID in immunoglobulin gene variable and switch regions. <i>Nature Immunology</i> , 2011, 12, 70-76.  | 14.5 | 106       |
| 38 | Impact of DNA polymorphisms in key DNA base excision repair proteins on cancer risk. <i>Human and Experimental Toxicology</i> , 2012, 31, 981-1005.   | 2.2  | 106       |
| 39 | Hex1: a new human Rad2 nuclease family member with homology to yeast exonuclease 1. <i>Nucleic Acids Research</i> , 1998, 26, 3762-3768.  | 14.5 | 105       |
| 40 | Second human protein with homology to the <i>Escherichia coli</i> abasic endonuclease exonuclease III. <i>Environmental and Molecular Mutagenesis</i> , 2000, 36, 312-324.                                  | 2.2  | 104       |
| 41 | Cockayne syndrome B protein stimulates apurinic endonuclease 1 activity and protects against agents that introduce base excision repair intermediates. <i>Nucleic Acids Research</i> , 2007, 35, 4103-4113. | 14.5 | 104       |
| 42 | Variation in base excision repair capacity. <i>Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis</i> , 2011, 711, 100-112.  | 1.0  | 104       |
| 43 | Identification and Characterization of Inhibitors of Human Apurinic/apyrimidinic Endonuclease APE1. <i>PLoS ONE</i> , 2009, 4, e5740.   | 2.5  | 100       |
| 44 | Synthesis, Biological Evaluation, and Structure-Activity Relationships of a Novel Class of Apurinic/Apyrimidinic Endonuclease 1 Inhibitors. <i>Journal of Medicinal Chemistry</i> , 2012, 55, 3101-3112.    | 6.4  | 99        |
| 45 | Inhibition of Ape1 nuclease activity by lead, iron, and cadmium.. <i>Environmental Health Perspectives</i> , 2004, 112, 799-804.  | 6.0  | 98        |
| 46 | Elements in abasic site recognition by the major human and <i>Escherichia coli</i> apurinic/apyrimidinic endonucleases. <i>Nucleic Acids Research</i> , 1998, 26, 2771-2778.                                | 14.5 | 96        |
| 47 | Abasic Site Binding by the Human Apurinic Endonuclease, Ape, and Determination of the DNA Contact Sites. <i>Nucleic Acids Research</i> , 1997, 25, 933-939.   | 14.5 | 95        |
| 48 | The Human Interferon- and Estrogen-Regulated <i>ISG20/HEM45</i> Gene Product Degrades Single-Stranded RNA and DNA in Vitro. <i>Biochemistry</i> , 2001, 40, 7174-7179.                                      | 2.5  | 90        |
| 49 | A Dominant-Negative Form of the Major Human Abasic Endonuclease Enhances Cellular Sensitivity to Laboratory and Clinical DNA-Damaging Agents. <i>Molecular Cancer Research</i> , 2007, 5, 61-70.            | 3.4  | 90        |
| 50 | Properties of and Substrate Determinants for the Exonuclease Activity of Human Apurinic Endonuclease Ape1. <i>Journal of Molecular Biology</i> , 2003, 330, 1027-1037.                                      | 4.2  | 89        |
| 51 | Mitochondrial DNA, base excision repair and neurodegeneration. <i>DNA Repair</i> , 2008, 7, 1098-1109.  | 2.8  | 89        |
| 52 | Small molecule inhibitors of DNA repair nuclease activities of APE1. <i>Cellular and Molecular Life Sciences</i> , 2010, 67, 3621-3631.   | 5.4  | 88        |
| 53 | Oxidative stress and impaired oligodendrocyte precursor cell differentiation in neurological disorders. <i>Cellular and Molecular Life Sciences</i> , 2021, 78, 4615-4637.                                  | 5.4  | 85        |
| 54 | Intrusion of a DNA Repair Protein in the RNome World: Is This the Beginning of a New Era?. <i>Molecular and Cellular Biology</i> , 2010, 30, 366-371.   | 2.3  | 82        |

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|----|--|------|-----------|
| 55 | Synthetic lethal targeting of DNA double-strand break repair deficient cells by human apurinic/apyrimidinic endonuclease inhibitors. <i>International Journal of Cancer</i> , 2012, 131, 2433-2444.                      | 5.1  | 79        |
| 56 | DNA Polymerase Beta Participates in Mitochondrial DNA Repair. <i>Molecular and Cellular Biology</i> , 2017, 37, .  | 2.3  | 77        |
| 57 | Aprataxin localizes to mitochondria and preserves mitochondrial function. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 7437-7442.                                 | 7.1  | 76        |
| 58 | Regulation of WRN Helicase Activity in Human Base Excision Repair. <i>Journal of Biological Chemistry</i> , 2004, 279, 53465-53474.  | 3.4  | 75        |
| 59 | Direct and indirect roles of RECQL4 in modulating base excision repair capacity. <i>Human Molecular Genetics</i> , 2009, 18, 3470-3483.  | 2.9  | 75        |
| 60 | Impairment of APE1 Function Enhances Cellular Sensitivity to Clinically Relevant Alkylators and Antimetabolites. <i>Molecular Cancer Research</i> , 2009, 7, 897-906.  | 3.4  | 73        |
| 61 | The Involvement of DNA-Damage and -Repair Defects in Neurological Dysfunction. <i>American Journal of Human Genetics</i> , 2008, 82, 539-566.  | 6.2  | 72        |
| 62 | Cockayne syndrome group A and B proteins converge on transcription-linked resolution of non-B DNA. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 12502-12507.      | 7.1  | 72        |
| 63 | A quantitative model of human DNA base excision repair. I. mechanistic insights. <i>Nucleic Acids Research</i> , 2002, 30, 1817-1825.  | 14.5 | 71        |
| 64 | Human AP endonuclease (APE1) demonstrates endonucleolytic activity against AP sites in single-stranded DNA. <i>DNA Repair</i> , 2004, 3, 527-533.  | 2.8  | 69        |
| 65 | Neil1 is a genetic modifier of somatic and germline CAG trinucleotide repeat instability in R6/1 mice. <i>Human Molecular Genetics</i> , 2012, 21, 4939-4947.  | 2.9  | 66        |
| 66 | The excitatory neurotransmitter glutamate stimulates DNA repair to increase neuronal resiliency. <i>Mechanisms of Ageing and Development</i> , 2011, 132, 405-411.   | 4.6  | 65        |
| 67 | Base excision repair and the central nervous system. <i>Neuroscience</i> , 2007, 145, 1187-1200.   | 2.3  | 63        |
| 68 | Development and evaluation of human AP endonuclease inhibitors in melanoma and glioma cell lines. <i>British Journal of Cancer</i> , 2011, 104, 653-663.   | 6.4  | 63        |
| 69 | New insights into the structure of abasic DNA from molecular dynamics simulations. <i>Nucleic Acids Research</i> , 2000, 28, 2613-2626.  | 14.5 | 62        |
| 70 | Characterization of Mg <sup>2+</sup> Binding to the DNA Repair Protein Apurinic/Apyrimidic Endonuclease 1 via Solid-State 25Mg NMR Spectroscopy. <i>Journal of the American Chemical Society</i> , 2008, 130, 9332-9341. | 13.7 | 62        |
| 71 | Nucleophosmin modulates stability, activity, and nucleolar accumulation of base excision repair proteins. <i>Molecular Biology of the Cell</i> , 2014, 25, 1641-1652.  | 2.1  | 62        |
| 72 | Molecular interactions of human Exo1 with DNA. <i>Nucleic Acids Research</i> , 2002, 30, 942-949.  | 14.5 | 61        |

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|----|--|------|-----------|
| 73 | Mapping the protein-DNA interface and the metal-binding site of the major human apurinic/aprimidinic endonuclease. <i>Journal of Molecular Biology</i> , 2000, 298, 447-459.                       | 4.2  | 59        |
| 74 | XRCC1 and DNA polymerase $\beta$ interaction contributes to cellular alkylating-agent resistance and single-strand break repair. <i>Journal of Cellular Biochemistry</i> , 2005, 95, 794-804.      | 2.6  | 59        |
| 75 | Repair of persistent strand breaks in the mitochondrial genome. <i>Mechanisms of Ageing and Development</i> , 2012, 133, 169-175.  | 4.6  | 57        |
| 76 | Telomere Repeat Binding Factor 2 Interacts with Base Excision Repair Proteins and Stimulates DNA Synthesis by DNA Polymerase $\beta$ . <i>Cancer Research</i> , 2006, 66, 113-124.                 | 0.9  | 56        |
| 77 | XRCC1 coordinates disparate responses and multiprotein repair complexes depending on the nature and context of the DNA damage. <i>Environmental and Molecular Mutagenesis</i> , 2011, 52, 623-635. | 2.2  | 56        |
| 78 | Human Cockayne syndrome B protein reciprocally communicates with mitochondrial proteins and promotes transcriptional elongation. <i>Nucleic Acids Research</i> , 2012, 40, 8392-8405.              | 14.5 | 56        |
| 79 | Inhibitors of the apurinic/aprimidinic endonuclease 1 (APE1)/nucleophosmin (NPM1) interaction that display anti-tumor properties. <i>Molecular Carcinogenesis</i> , 2016, 55, 688-704.             | 2.7  | 56        |
| 80 | DNA base excision repair activities and pathway function in mitochondrial and cellular lysates from cells lacking mitochondrial DNA. <i>Nucleic Acids Research</i> , 2004, 32, 2181-2192.          | 14.5 | 53        |
| 81 | A real-time fluorescence method for enzymatic characterization of specialized human DNA polymerases. <i>Nucleic Acids Research</i> , 2009, 37, e128-e128.  | 14.5 | 53        |
| 82 | Modulation of DNA base excision repair during neuronal differentiation. <i>Neurobiology of Aging</i> , 2013, 34, 1717-1727.  | 3.1  | 52        |
| 83 | Cloning of the <i>Drosophila</i> ribosomal protein S3: another multifunctional ribosomal protein with AP endonuclease DNA repair activity. <i>Nucleic Acids Research</i> , 1993, 21, 2516-2516.    | 14.5 | 51        |
| 84 | DNA damage, DNA repair, ageing and age-related disease. <i>Mechanisms of Ageing and Development</i> , 2008, 129, 349-352.  | 4.6  | 51        |
| 85 | Direct interaction between XRCC1 and UNG2 facilitates rapid repair of uracil in DNA by XRCC1 complexes. <i>DNA Repair</i> , 2010, 9, 785-795.  | 2.8  | 51        |
| 86 | XRCC1 suppresses somatic hypermutation and promotes alternative nonhomologous end joining in <i>IGH</i> genes. <i>Journal of Experimental Medicine</i> , 2011, 208, 2209-2216.                     | 8.5  | 51        |
| 87 | Base excision repair in the mammalian brain: Implication for age related neurodegeneration. <i>Mechanisms of Ageing and Development</i> , 2013, 134, 440-448.                                      | 4.6  | 50        |
| 88 | Ape1 Abasic Endonuclease Activity is Regulated by Magnesium and Potassium Concentrations and is Robust on Alternative DNA Structures. <i>Journal of Molecular Biology</i> , 2005, 345, 1003-1014.  | 4.2  | 49        |
| 89 | CSB interacts with SNM1A and promotes DNA interstrand crosslink processing. <i>Nucleic Acids Research</i> , 2015, 43, 247-258.   | 14.5 | 48        |
| 90 | Connecting aging biology and inflammation in the omics era. <i>Journal of Clinical Investigation</i> , 2022, 132, .  | 8.2  | 48        |

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|-----|--|------|-----------|
| 91  | Targeting human apurinic/apyrimidinic endonuclease 1 (APE1) in phosphatase and tensin homolog (PTEN) deficient melanoma cells for personalized therapy. <i>Oncotarget</i> , 2014, 5, 3273-3286.  | 1.8  | 47        |
| 92  | Removal by human apurinic/apyrimidinic endonuclease 1 (Ape 1) and Escherichia coli exonuclease III of 3â€²-phosphoglycolates from DNA treated with neocarzinostatin, calicheamicin, and $\beta^3$ -radiation. <i>Biochemical Pharmacology</i> , 1999, 57, 531-538. | 4.4  | 46        |
| 93  | Human abasic endonuclease action on multilesion abasic clusters: implications for radiation-induced biological damage. <i>Nucleic Acids Research</i> , 2008, 36, 2717-2727.  | 14.5 | 46        |
| 94  | Lucanthone and Its Derivative Hycanthone Inhibit Apurinic Endonuclease-1 (APE1) by Direct Protein Binding. <i>PLoS ONE</i> , 2011, 6, e23679.  | 2.5  | 45        |
| 95  | The Human Homolog of Escherichia coli Orn Degrades Small Single-stranded RNA and DNA Oligomers. <i>Journal of Biological Chemistry</i> , 2000, 275, 25900-25906.   | 3.4  | 44        |
| 96  | Characterization of the Endoribonuclease Active Site of Human Apurinic/Apyrimidinic Endonuclease 1. <i>Journal of Molecular Biology</i> , 2011, 411, 960-971.  | 4.2  | 44        |
| 97  | Androgen receptor-binding sites are highly mutated in prostate cancer. <i>Nature Communications</i> , 2020, 11, 832.   | 12.8 | 44        |
| 98  | Complementary non-radioactive assays for investigation of human flap endonuclease 1 activity. <i>Nucleic Acids Research</i> , 2011, 39, e11-e11.   | 14.5 | 43        |
| 99  | Functional capacity of XRCC1 protein variants identified in DNA repair-deficient Chinese hamster ovary cell lines and the human population. <i>Nucleic Acids Research</i> , 2010, 38, 5023-5035.   | 14.5 | 42        |
| 100 | APE1 deficiency promotes cellular senescence and premature aging features. <i>Nucleic Acids Research</i> , 2018, 46, 5664-5677.  | 14.5 | 41        |
| 101 | Base Excision Repair: Contribution to Tumorigenesis and Target in Anticancer Treatment Paradigms. <i>Current Medicinal Chemistry</i> , 2012, 19, 3922-3936.  | 2.4  | 40        |
| 102 | Functions of the major abasic endonuclease (APE1) in cell viability and genotoxin resistance. <i>Mutagenesis</i> , 2020, 35, 27-38.  | 2.6  | 40        |
| 103 | Trans-complementation by human apurinic endonuclease (Ape) of hypersensitivity to DNA damage and spontaneous mutator phenotype in apn 1-yeast. <i>Nucleic Acids Research</i> , 1995, 23, 5027-5033.  | 14.5 | 39        |
| 104 | Identification of factors interacting with hMSH2 in the fetal liver utilizing the yeast two-hybrid system. <i>Mutation Research DNA Repair</i> , 2000, 460, 41-52.   | 3.7  | 38        |
| 105 | Base excision repair capacity in informing healthspan. <i>Carcinogenesis</i> , 2014, 35, 2643-2652.  | 2.8  | 38        |
| 106 | Prolactin message in brain and pituitary of adult male rats is identical: PCR cloning and sequencing of hypothalamic prolactin cDNA from intact and hypophysectomized adult male rats.. <i>Endocrinology</i> , 1992, 131, 2488-2490.                               | 2.8  | 36        |
| 107 | DNA Damage Levels and Biochemical Repair Capacities Associated with XRCC1 Deficiency. <i>Biochemistry</i> , 2005, 44, 14335-14343.   | 2.5  | 36        |
| 108 | The Nucleotide Sequence, DNA Damage Location, and Protein Stoichiometry Influence the Base Excision Repair Outcome at CAG/CTG Repeats. <i>Biochemistry</i> , 2012, 51, 3919-3932.  | 2.5  | 36        |



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|-----|---|------|-----------|
| 109 | Reduced Nuclease Activity of Apurinic/Apyrimidinic Endonuclease (APE1) Variants on Nucleosomes. <i>Journal of Biological Chemistry</i> , 2015, 290, 21067-21075.  | 3.4  | 36        |
| 110 | Investigation of the Role of the Histidine-Aspartate Pair in the Human Exonuclease III-like Abasic Endonuclease, Ape1. <i>Journal of Molecular Biology</i> , 2003, 329, 311-322.  | 4.2  | 35        |
| 111 | DNA damage repair response in mesenchymal stromal cells: From cellular senescence and aging to apoptosis and differentiation ability. <i>Ageing Research Reviews</i> , 2020, 62, 101125.  | 10.9 | 35        |
| 112 | XRCC1 down-regulation in human cells leads to DNA-damaging agent hypersensitivity, elevated sister chromatid exchange, and reduced survival of BRCA2 mutant cells. <i>Environmental and Molecular Mutagenesis</i> , 2007, 48, 491-500.                  | 2.2  | 34        |
| 113 | The region of XRCC1 which harbours the three most common nonsynonymous polymorphic variants, is essential for the scaffolding function of XRCC1. <i>DNA Repair</i> , 2012, 11, 357-366.   | 2.8  | 34        |
| 114 | Nucleotide Sequence and DNA Secondary Structure, as Well as Replication Protein A, Modulate the Single-stranded Abasic Endonuclease Activity of APE1. <i>Journal of Biological Chemistry</i> , 2006, 281, 3889-3898.                                    | 3.4  | 33        |
| 115 | Serum APE1 as a predictive marker for platinum-based chemotherapy of non-small cell lung cancer patients. <i>Oncotarget</i> , 2016, 7, 77482-77494.   | 1.8  | 33        |
| 116 | Disparity between DNA base excision repair in yeast and mammals: translational implications. <i>Cancer Research</i> , 2003, 63, 549-54.   | 0.9  | 33        |
| 117 | Effect of Protein Binding on Ultrafast DNA Dynamics: Characterization of a DNA:APE1 Complex. <i>Biophysical Journal</i> , 2005, 89, 4129-4138.  | 0.5  | 32        |
| 118 | XRCC1 protects against the lethality of induced oxidative DNA damage in nondividing neural cells. <i>Nucleic Acids Research</i> , 2008, 36, 5111-5121.  | 14.5 | 31        |
| 119 | Functional Assessment of Population and Tumor-Associated APE1 Protein Variants. <i>PLoS ONE</i> , 2013, 8, e65922.  | 2.5  | 30        |
| 120 | Characterization of the Promoter Region of the Human Apurinic Endonuclease Gene (APE). <i>Journal of Biological Chemistry</i> , 1995, 270, 5556-5564.   | 3.4  | 29        |
| 121 | Processing of nonconventional DNA strand break ends. <i>Environmental and Molecular Mutagenesis</i> , 2007, 48, 772-782.  | 2.2  | 29        |
| 122 | WRN exonuclease activity is blocked by DNA termini harboring 3' obstructive groups. <i>Mechanisms of Ageing and Development</i> , 2007, 128, 259-266.   | 4.6  | 29        |
| 123 | The Interaction between Polynucleotide Kinase Phosphatase and the DNA Repair Protein XRCC1 Is Critical for Repair of DNA Alkylation Damage and Stable Association at DNA Damage Sites. <i>Journal of Biological Chemistry</i> , 2012, 287, 39233-39244. | 3.4  | 29        |
| 124 | S-Glutathionylation of Cysteine 99 in the APE1 Protein Impairs Abasic Endonuclease Activity. <i>Journal of Molecular Biology</i> , 2011, 414, 313-326.  | 4.2  | 28        |
| 125 | Human RECQL5 participates in the removal of endogenous DNA damage. <i>Molecular Biology of the Cell</i> , 2012, 23, 4273-4285.  | 2.1  | 28        |
| 126 | Diverse Small Molecule Inhibitors of Human Apurinic/Apyrimidinic Endonuclease APE1 Identified from a Screen of a Large Public Collection. <i>PLoS ONE</i> , 2012, 7, e47974.  | 2.5  | 28        |



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|-----|---|------|-----------|
| 127 | Werner syndrome protein 1367 variants and disposition towards coronary artery disease in Caucasian patients. <i>Mechanisms of Ageing and Development</i> , 2004, 125, 491-496.  | 4.6  | 27        |
| 128 | Estimating the Effect of Human Base Excision Repair Protein Variants on the Repair of Oxidative DNA Base Damage. <i>Cancer Epidemiology Biomarkers and Prevention</i> , 2006, 15, 1000-1008.  | 2.5  | 27        |
| 129 | Acute Ethanol Exposure Suppresses the Repair of O6-Methylguanine DNA Lesions in Castrated Adult Male Rats. <i>Alcoholism: Clinical and Experimental Research</i> , 1994, 18, 1267-1271.   | 2.4  | 26        |
| 130 | Expression specificity of the mouse exonuclease 1 (mExo1) gene. <i>Nucleic Acids Research</i> , 1999, 27, 4114-4120.  | 14.5 | 25        |
| 131 | Complementary functions of the <i>Saccharomyces cerevisiae</i> Rad2 family nucleases in Okazaki fragment maturation, mutation avoidance, and chromosome stability. <i>DNA Repair</i> , 2003, 2, 925-940.  | 2.8  | 25        |
| 132 | Targeting DNA repair proteins for cancer treatment. <i>Cellular and Molecular Life Sciences</i> , 2010, 67, 3569-3572.  | 5.4  | 25        |
| 133 | XRCC1 haploinsufficiency in mice has little effect on aging, but adversely modifies exposure-dependent susceptibility. <i>Nucleic Acids Research</i> , 2011, 39, 7992-8004.   | 14.5 | 25        |
| 134 | Apurinic endonuclease-1 preserves neural genome integrity to maintain homeostasis and thermoregulation and prevent brain tumors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E12285-E12294. | 7.1  | 25        |
| 135 | Regulation of eukaryotic abasic endonucleases and their role in genetic stability.. <i>Environmental Health Perspectives</i> , 1997, 105, 931-934.  | 6.0  | 24        |
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