# **Aziz Sancar**

### List of Publications by Citations

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28,264 156 309 90 h-index g-index citations papers 30,620 319 7.37 9.3 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
309	Molecular mechanisms of mammalian DNA repair and the DNA damage checkpoints. <i>Annual Review of Biochemistry</i> , <b>2004</b> , 73, 39-85	29.1	2443
308	Structure and function of DNA photolyase and cryptochrome blue-light photoreceptors. <i>Chemical Reviews</i> , <b>2003</b> , 103, 2203-37	68.1	1002
307	DNA excision repair. <i>Annual Review of Biochemistry</i> , <b>1996</b> , 65, 43-81	29.1	965
306	DNA repair enzymes. <i>Annual Review of Biochemistry</i> , <b>1988</b> , 57, 29-67	29.1	750
305	Dual role of TFIIH in DNA excision repair and in transcription by RNA polymerase II. <i>Nature</i> , <b>1994</b> , 368, 769-72	50.4	635
304	Structure and function of DNA photolyase. <i>Biochemistry</i> , <b>1994</b> , 33, 2-9	3.2	574
303	A novel repair enzyme: UVRABC excision nuclease of Escherichia coli cuts a DNA strand on both sides of the damaged region. <i>Cell</i> , <b>1983</b> , 33, 249-60	56.2	561
302	Reconstitution of human DNA repair excision nuclease in a highly defined system. <i>Journal of Biological Chemistry</i> , <b>1995</b> , 270, 2415-8	5.4	375
301	Role of mouse cryptochrome blue-light photoreceptor in circadian photoresponses. <i>Science</i> , <b>1998</b> , 282, 1490-4	33.3	320
300	Repair of cisplatinDNA adducts by the mammalian excision nuclease. <i>Biochemistry</i> , <b>1996</b> , 35, 10004-13	3.2	288
299	Reaction mechanism of human DNA repair excision nuclease. <i>Journal of Biological Chemistry</i> , <b>1996</b> , 271, 8285-94	5.4	277
298	Loading of the human 9-1-1 checkpoint complex onto DNA by the checkpoint clamp loader hRad17-replication factor C complex in vitro. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2003</b> , 100, 1633-8	11.5	269
297	Identification of the uvrA gene product. <i>Journal of Molecular Biology</i> , <b>1981</b> , 148, 45-62	6.5	263
296	Coupling of human circadian and cell cycles by the timeless protein. <i>Molecular and Cellular Biology</i> , <b>2005</b> , 25, 3109-16	4.8	254
295	Putative blue-light photoreceptors from Arabidopsis thaliana and Sinapis alba with a high degree of sequence homology to DNA photolyase contain the two photolyase cofactors but lack DNA repair activity. <i>Biochemistry</i> , <b>1995</b> , 34, 6892-9	3.2	243
294	Putative human blue-light photoreceptors hCRY1 and hCRY2 are flavoproteins. <i>Biochemistry</i> , <b>1996</b> , 35, 13871-7	3.2	239
293	A cryptochrome/photolyase class of enzymes with single-stranded DNA-specific photolyase activity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2006</b> , 103, 1769	96 <sup>-</sup> 7500	235

### (1995-2005)

292	Direct observation of thymine dimer repair in DNA by photolyase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 16128-32	11.5	221	
291	Nucleotide excision repair. <i>Progress in Molecular Biology and Translational Science</i> , <b>2005</b> , 79, 183-235		220	
290	Cryptochrome: the second photoactive pigment in the eye and its role in circadian photoreception. <i>Annual Review of Biochemistry</i> , <b>2000</b> , 69, 31-67	29.1	219	
289	DNA repair: enzymatic mechanisms and relevance to drug response. <i>Journal of the National Cancer Institute</i> , <b>1996</b> , 88, 1346-60	9.7	218	
288	Human transcription-repair coupling factor CSB/ERCC6 is a DNA-stimulated ATPase but is not a helicase and does not disrupt the ternary transcription complex of stalled RNA polymerase II. <i>Journal of Biological Chemistry</i> , <b>1997</b> , 272, 1885-90	5.4	208	
287	Nucleotide excision repair. <i>Photochemistry and Photobiology</i> , <b>1993</b> , 57, 905-21	3.6	199	
286	cis-Diammine(pyridine)chloroplatinum(II), a monofunctional platinum(II) antitumor agent: Uptake, structure, function, and prospects. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2008</b> , 105, 8902-7	11.5	198	
285	The human Tim/Tipin complex coordinates an Intra-S checkpoint response to UV that slows replication fork displacement. <i>Molecular and Cellular Biology</i> , <b>2007</b> , 27, 3131-42	4.8	194	
284	Purification of PCNA as a nucleotide excision repair protein. <i>Nucleic Acids Research</i> , <b>1992</b> , 20, 2441-6	20.1	194	
283	Nucleotide excision repair: from E. coli to man. <i>Biochimie</i> , <b>1999</b> , 81, 15-25	4.6	182	
282	DNA repair in humans. <i>Annual Review of Genetics</i> , <b>1995</b> , 29, 69-105	14.5	180	
281	Ultrafast dynamics of flavins in five redox states. <i>Journal of the American Chemical Society</i> , <b>2008</b> , 130, 13132-9	16.4	173	
280	Circadian clock control of the cellular response to DNA damage. FEBS Letters, 2010, 584, 2618-25	3.8	172	
279	Circadian control of XPA and excision repair of cisplatin-DNA damage by cryptochrome and HERC2 ubiquitin ligase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2010</b> , 107, 4890-5	11.5	169	
278	DDB accumulates at DNA damage sites immediately after UV irradiation and directly stimulates nucleotide excision repair. <i>Journal of Biological Chemistry</i> , <b>2002</b> , 277, 1637-40	5.4	167	
277	A new mechanism for repairing oxidative damage to DNA: (A)BC excinuclease removes AP sites and thymine glycols from DNA. <i>Biochemistry</i> , <b>1989</b> , 28, 7979-84	3.2	167	
276	Dynamics and mechanism of repair of ultraviolet-induced (6-4) photoproduct by photolyase. <i>Nature</i> , <b>2010</b> , 466, 887-890	50.4	165	
275	Human DNA repair excision nuclease. Analysis of the roles of the subunits involved in dual incisions by using anti-XPG and anti-ERCC1 antibodies. <i>Journal of Biological Chemistry</i> , <b>1995</b> , 270, 20862-9	5.4	162	

274	The general transcription-repair factor TFIIH is recruited to the excision repair complex by the XPA protein independent of the TFIIE transcription factor. <i>Journal of Biological Chemistry</i> , <b>1995</b> , 270, 4896-	90 <sup>5</sup> 2 <sup>4</sup>	157
273	Control of skin cancer by the circadian rhythm. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2011</b> , 108, 18790-5	11.5	155
272	Replication protein A confers structure-specific endonuclease activities to the XPF-ERCC1 and XPG subunits of human DNA repair excision nuclease. <i>Journal of Biological Chemistry</i> , <b>1996</b> , 271, 11047-50	5.4	152
271	Role of structural plasticity in signal transduction by the cryptochrome blue-light photoreceptor. <i>Biochemistry</i> , <b>2005</b> , 44, 3795-805	3.2	151
270	DNA damage in the nucleosome core is refractory to repair by human excision nuclease. <i>Molecular and Cellular Biology</i> , <b>2000</b> , 20, 9173-81	4.8	150
269	Circadian oscillation of nucleotide excision repair in mammalian brain. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2009</b> , 106, 2864-7	11.5	149
268	Genome-wide analysis of human global and transcription-coupled excision repair of UV damage at single-nucleotide resolution. <i>Genes and Development</i> , <b>2015</b> , 29, 948-60	12.6	147
267	Order of assembly of human DNA repair excision nuclease. <i>Journal of Biological Chemistry</i> , <b>1999</b> , 274, 18759-68	5.4	147
266	Active site of DNA photolyase: tryptophan-306 is the intrinsic hydrogen atom donor essential for flavin radical photoreduction and DNA repair in vitro. <i>Biochemistry</i> , <b>1991</b> , 30, 6322-9	3.2	147
265	Where transcription meets repair. <i>Cell</i> , <b>1994</b> , 77, 9-12	56.2	146
264	Cryptochrome, circadian cycle, cell cycle checkpoints, and cancer. Cancer Research, 2005, 65, 6828-34	10.1	143
<ul><li>264</li><li>263</li></ul>	Cryptochrome, circadian cycle, cell cycle checkpoints, and cancer. <i>Cancer Research</i> , <b>2005</b> , 65, 6828-34  Preferential binding of ATR protein to UV-damaged DNA. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2002</b> , 99, 6673-8	10.1	
	Preferential binding of ATR protein to UV-damaged DNA. <i>Proceedings of the National Academy of</i>		
263	Preferential binding of ATR protein to UV-damaged DNA. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2002</b> , 99, 6673-8  Structure and function of photolyase and in vivo enzymology: 50th anniversary. <i>Journal of</i>	11.5 5.4	141
263	Preferential binding of ATR protein to UV-damaged DNA. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2002</b> , 99, 6673-8  Structure and function of photolyase and in vivo enzymology: 50th anniversary. <i>Journal of Biological Chemistry</i> , <b>2008</b> , 283, 32153-7  Human nucleotide excision repair in vitro: repair of pyrimidine dimers, psoralen and cisplatin	11.5 5.4	141
<ul><li>263</li><li>262</li><li>261</li></ul>	Preferential binding of ATR protein to UV-damaged DNA. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2002</b> , 99, 6673-8  Structure and function of photolyase and in vivo enzymology: 50th anniversary. <i>Journal of Biological Chemistry</i> , <b>2008</b> , 283, 32153-7  Human nucleotide excision repair in vitro: repair of pyrimidine dimers, psoralen and cisplatin adducts by HeLa cell-free extract. <i>Nucleic Acids Research</i> , <b>1989</b> , 17, 4471-84  Recognition and repair of the cyclobutane thymine dimer, a major cause of skin cancers, by the	11.5 5.4 20.1 12.6	141 140 140
263 262 261 260	Preferential binding of ATR protein to UV-damaged DNA. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2002</b> , 99, 6673-8  Structure and function of photolyase and in vivo enzymology: 50th anniversary. <i>Journal of Biological Chemistry</i> , <b>2008</b> , 283, 32153-7  Human nucleotide excision repair in vitro: repair of pyrimidine dimers, psoralen and cisplatin adducts by HeLa cell-free extract. <i>Nucleic Acids Research</i> , <b>1989</b> , 17, 4471-84  Recognition and repair of the cyclobutane thymine dimer, a major cause of skin cancers, by the human excision nuclease. <i>Genes and Development</i> , <b>2003</b> , 17, 2539-51  The uvrB gene of Escherichia coli has both lexA-repressed and lexA-independent promoters. <i>Cell</i> ,	11.5 5.4 20.1 12.6	141 140 140

### (2008-1997)

256	Reconstitution of human excision nuclease with recombinant XPF-ERCC1 complex. <i>Journal of Biological Chemistry</i> , <b>1997</b> , 272, 3833-7	5.4	136
255	The SWI/SNF chromatin-remodeling factor stimulates repair by human excision nuclease in the mononucleosome core particle. <i>Molecular and Cellular Biology</i> , <b>2002</b> , 22, 6779-87	4.8	132
254	Dynamics and mechanism of cyclobutane pyrimidine dimer repair by DNA photolyase. <i>Proceedings</i> of the National Academy of Sciences of the United States of America, <b>2011</b> , 108, 14831-6	11.5	130
253	Identification of a neutral flavin radical and characterization of a second chromophore in Escherichia coli DNA photolyase. <i>Biochemistry</i> , <b>1984</b> , 23, 2673-9	3.2	128
252	Guidelines for Genome-Scale Analysis of Biological Rhythms. <i>Journal of Biological Rhythms</i> , <b>2017</b> , 32, 380-393	3.2	127
251	Mechanisms of DNA Repair by Photolyase and Excision Nuclease (Nobel Lecture). <i>Angewandte Chemie - International Edition</i> , <b>2016</b> , 55, 8502-27	16.4	127
250	Characterization of reaction intermediates of human excision repair nuclease. <i>Journal of Biological Chemistry</i> , <b>1997</b> , 272, 28971-9	5.4	124
249	Dual modes of CLOCK:BMAL1 inhibition mediated by Cryptochrome and Period proteins in the mammalian circadian clock. <i>Genes and Development</i> , <b>2014</b> , 28, 1989-98	12.6	123
248	Reaction mechanism of (6-4) photolyase. <i>Journal of Biological Chemistry</i> , <b>1997</b> , 272, 32580-90	5.4	123
247	Excision repair in mammalian cells. <i>Journal of Biological Chemistry</i> , <b>1995</b> , 270, 15915-8	5.4	123
246	Overproduction, purification, and characterization of the XPC subunit of the human DNA repair excision nuclease. <i>Journal of Biological Chemistry</i> , <b>1996</b> , 271, 19451-6	5.4	122
245	Structure and function of transcription-repair coupling factor. I. Structural domains and binding properties. <i>Journal of Biological Chemistry</i> , <b>1995</b> , 270, 4882-9	5.4	120
244	Inhibition of nucleotide excision repair by the cyclin-dependent kinase inhibitor p21. <i>Journal of Biological Chemistry</i> , <b>1995</b> , 270, 22008-16	5.4	120
243	The non-catalytic function of XPG protein during dual incision in human nucleotide excision repair. <i>Journal of Biological Chemistry</i> , <b>1997</b> , 272, 16030-4	5.4	117
242	Determination of rates and yields of interchromophore (folateflavin) energy transfer and intermolecular (flavinDNA) electron transfer in Escherichia coli photolyase by time-resolved fluorescence and absorption spectroscopy. <i>Biochemistry</i> , <b>1991</b> , 30, 11262-70	3.2	117
241	Effect of base, pentose, and phosphodiester backbone structures on binding and repair of pyrimidine dimers by Escherichia coli DNA photolyase. <i>Biochemistry</i> , <b>1991</b> , 30, 8623-30	3.2	115
240	Escherichia coli DNA photolyase is a flavoprotein. <i>Journal of Molecular Biology</i> , <b>1984</b> , 172, 223-7	6.5	115
239	Ultrafast dynamics and anionic active states of the flavin cofactor in cryptochrome and photolyase. Journal of the American Chemical Society, <b>2008</b> , 130, 7695-701	16.4	112

238	Light induction of a vertebrate clock gene involves signaling through blue-light receptors and MAP kinases. <i>Current Biology</i> , <b>2002</b> , 12, 844-8	6.3	110
237	DNA interstrand cross-links induce futile repair synthesis in mammalian cell extracts. <i>Molecular and Cellular Biology</i> , <b>2000</b> , 20, 2446-54	4.8	110
236	The active form of Escherichia coli DNA photolyase contains a fully reduced flavin and not a flavin radical, both in vivo and in vitro. <i>Biochemistry</i> , <b>1987</b> , 26, 7121-7	3.2	107
235	Reaction mechanism of Drosophila cryptochrome. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2011</b> , 108, 516-21	11.5	102
234	Regulation of the mammalian circadian clock by cryptochrome. <i>Journal of Biological Chemistry</i> , <b>2004</b> , 279, 34079-82	5.4	102
233	Sleep deprivation effects on circadian clock gene expression in the cerebral cortex parallel electroencephalographic differences among mouse strains. <i>Journal of Neuroscience</i> , <b>2008</b> , 28, 7193-201	6.6	101
232	Genome-wide kinetics of DNA excision repair in relation to chromatin state and mutagenesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, E2124-33	11.5	100
231	Photochemistry and photobiology of cryptochrome blue-light photopigments: the search for a photocycle. <i>Photochemistry and Photobiology</i> , <b>2005</b> , 81, 1291-304	3.6	99
230	Structure and function of transcription-repair coupling factor. II. Catalytic properties. <i>Journal of Biological Chemistry</i> , <b>1995</b> , 270, 4890-5	5.4	99
229	(A)BC excinuclease: the Escherichia coli nucleotide excision repair enzyme. <i>Molecular Microbiology</i> , <b>1992</b> , 6, 2219-24	4.1	99
228	Animal type 1 cryptochromes. Analysis of the redox state of the flavin cofactor by site-directed mutagenesis. <i>Journal of Biological Chemistry</i> , <b>2008</b> , 283, 3256-3263	5.4	98
227	Amplification of single-strand DNA binding protein in Escherichia coli. <i>Nucleic Acids Research</i> , <b>1980</b> , 8, 3215-27	20.1	97
226	Clock Regulation of Metabolites Reveals Coupling between Transcription and Metabolism. <i>Cell Metabolism</i> , <b>2017</b> , 25, 961-974.e4	24.6	96
225	Purification and characterization of the XPF-ERCC1 complex of human DNA repair excision nuclease. <i>Journal of Biological Chemistry</i> , <b>1995</b> , 270, 22657-60	5.4	96
224	Cisplatin DNA damage and repair maps of the human genome at single-nucleotide resolution.  Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 11507-11512	211.5	96
223	Circadian clock, cancer, and chemotherapy. <i>Biochemistry</i> , <b>2015</b> , 54, 110-23	3.2	95
222	Structures of the human Rad17-replication factor C and checkpoint Rad 9-1-1 complexes visualized by glycerol spray/low voltage microscopy. <i>Journal of Biological Chemistry</i> , <b>2002</b> , 277, 15233-6	5.4	93
221	Absolute action spectrum of E-FADH2 and E-FADH2-MTHF forms of Escherichia coli DNA photolyase. <i>Biochemistry</i> , <b>1990</b> , 29, 7715-27	3.2	91

220	Reconstitution of RPA-covered single-stranded DNA-activated ATR-Chk1 signaling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2010</b> , 107, 13660-5	11.5	90	
219	Regulation of nucleotide excision repair activity by transcriptional and post-transcriptional control of the XPA protein. <i>Nucleic Acids Research</i> , <b>2011</b> , 39, 3176-87	20.1	89	
218	Quaternary structure of ATR and effects of ATRIP and replication protein A on its DNA binding and kinase activities. <i>Molecular and Cellular Biology</i> , <b>2004</b> , 24, 1292-300	4.8	88	
217	Photolyase/cryptochrome blue-light photoreceptors use photon energy to repair DNA and reset the circadian clock. <i>Oncogene</i> , <b>2002</b> , 21, 9043-56	9.2	88	
216	Biochemical analysis of the canonical model for the mammalian circadian clock. <i>Journal of Biological Chemistry</i> , <b>2011</b> , 286, 25891-902	5.4	87	
215	Identification of the uvrB gene product. <i>Journal of Molecular Biology</i> , <b>1981</b> , 148, 63-76	6.5	86	
214	Dynamic maps of UV damage formation and repair for the human genome. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, 6758-6763	11.5	85	
213	Binding of E. coli DNA photolyase to a defined substrate containing a single T mean value of T dimer. <i>Nucleic Acids Research</i> , <b>1987</b> , 15, 1109-20	20.1	85	
212	Purification and characterization of three members of the photolyase/cryptochrome family blue-light photoreceptors from Vibrio cholerae. <i>Journal of Biological Chemistry</i> , <b>2003</b> , 278, 39143-54	5.4	84	
211	Picosecond laser photolysis studies on the photorepair of pyrimidine dimers by DNA photolyase. 1. Laser photolysis of photolyase-2-deoxyuridine dinucleotide photodimer complex. <i>Journal of the American Chemical Society</i> , <b>1991</b> , 113, 3143-3145	16.4	84	
210	Determination of plasmid molecular weights from ultraviolet sensitivities. <i>Nature</i> , <b>1978</b> , 272, 471-2	50.4	84	
209	Nucleotide excision repair from site-specifically platinum-modified nucleosomes. <i>Biochemistry</i> , <b>2003</b> , 42, 6747-53	3.2	83	
208	Sequences of the E. coli uvrB gene and protein. <i>Nucleic Acids Research</i> , <b>1986</b> , 14, 2637-50	20.1	83	
207	DNA repair excision nuclease attacks undamaged DNA. A potential source of spontaneous mutations. <i>Journal of Biological Chemistry</i> , <b>2001</b> , 276, 25421-6	5.4	82	
206	Origin of the transient electron paramagnetic resonance signals in DNA photolyase. <i>Biochemistry</i> , <b>1999</b> , 38, 3857-66	3.2	82	
205	Cloning of uvrA, lexC and ssb genes of Escherichia coli. <i>Biochemical and Biophysical Research Communications</i> , <b>1979</b> , 90, 123-9	3.4	82	
204	Tipin-replication protein A interaction mediates Chk1 phosphorylation by ATR in response to genotoxic stress. <i>Journal of Biological Chemistry</i> , <b>2010</b> , 285, 16562-71	5.4	80	
203	Model for XPC-independent transcription-coupled repair of pyrimidine dimers in humans. <i>Journal of Biological Chemistry</i> , <b>1997</b> , 272, 7570-3	5.4	80	

202	The human Rad9-Rad1-Hus1 checkpoint complex stimulates flap endonuclease 1. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2004</b> , 101, 16762-7	11.5	80
201	Energy transfer (deazaflavin>FADH2) and electron transfer (FADH2>T T) kinetics in Anacystis nidulans photolyase. <i>Biochemistry</i> , <b>1992</b> , 31, 11244-8	3.2	80
200	Mammalian Period represses and de-represses transcription by displacing CLOCK-BMAL1 from promoters in a Cryptochrome-dependent manner. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, E6072-E6079	11.5	8o
199	Femtosecond Dynamics of DNA Photolyase: Energy Transfer of Antenna Initiation and Electron Transfer of Cofactor Reduction. <i>Journal of Physical Chemistry B</i> , <b>2004</b> , 108, 18026-18033	3.4	75
198	Regulation of apoptosis by the circadian clock through NF-kappaB signaling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2011</b> , 108, 12036-41	11.5	74
197	Human blue-light photoreceptor hCRY2 specifically interacts with protein serine/threonine phosphatase 5 and modulates its activity. <i>Photochemistry and Photobiology</i> , <b>1997</b> , 66, 727-31	3.6	74
196	Formation and function of flavin anion radical in cryptochrome 1 blue-light photoreceptor of monarch butterfly. <i>Journal of Biological Chemistry</i> , <b>2007</b> , 282, 17608-12	5.4	74
195	Substrate and Temperature Dependence of DNA Photolyase Repair Activity Examined with Ultrafast Spectroscopy. <i>Journal of the American Chemical Society</i> , <b>1997</b> , 119, 10532-10536	16.4	73
194	Electron microscopic study of (A)BC excinuclease. DNA is sharply bent in the UvrB-DNA complex. Journal of Molecular Biology, <b>1992</b> , 226, 425-32	6.5	73
193	Determining complete electron flow in the cofactor photoreduction of oxidized photolyase.  Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 12966-71	11.5	72
192	Repair of DNA-polypeptide crosslinks by human excision nuclease. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2006</b> , 103, 4056-61	11.5	72
191	Circadian regulation of cryptochrome genes in the mouse. <i>Molecular Brain Research</i> , <b>1999</b> , 71, 238-43		72
190	Photochemical properties of Escherichia coli DNA photolyase: selective photodecomposition of the second chromophore. <i>Biochemistry</i> , <b>1987</b> , 26, 4634-40	3.2	72
189	Molecular anatomy of the human excision nuclease assembled at sites of DNA damage. <i>Molecular and Cellular Biology</i> , <b>2002</b> , 22, 5938-45	4.8	71
188	Analysis of the role of intraprotein electron transfer in photoreactivation by DNA photolyase in vivo. <i>Biochemistry</i> , <b>2004</b> , 43, 15103-10	3.2	70
187	EPR, ENDOR, and TRIPLE resonance spectroscopy on the neutral flavin radical in Escherichia coli DNA photolyase. <i>Biochemistry</i> , <b>1999</b> , 38, 16740-8	3.2	70
186	Repair of psoralen and acetylaminofluorene DNA adducts by ABC excinuclease. <i>Journal of Molecular Biology</i> , <b>1985</b> , 184, 725-34	6.5	70
185	Posttranslational regulation of the mammalian circadian clock by cryptochrome and protein phosphatase 5. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2006</b> , 103, 10467-10472	11.5	69

184	Differential damage and repair of DNA-adducts induced by anti-cancer drug cisplatin across mouse organs. <i>Nature Communications</i> , <b>2019</b> , 10, 309	17.4	68
183	Circadian regulation of DNA excision repair: implications for chrono-chemotherapy. <i>Cell Cycle</i> , <b>2009</b> , 8, 1665-7	4.7	68
182	Nucleotide excision repair in E. coli and man. Advances in Protein Chemistry, 2004, 69, 43-71		68
181	Structure and function of the UvrB protein. <i>Journal of Biological Chemistry</i> , <b>1995</b> , 270, 8319-27	5.4	68
180	The photo repair of pyrimidine dimers by DNA photolyase and model systems. <i>Journal of Photochemistry and Photobiology B: Biology</i> , <b>1993</b> , 17, 219-28	6.7	68
179	Sequences of the E. coli uvrC gene and protein. <i>Nucleic Acids Research</i> , <b>1984</b> , 12, 4593-608	20.1	68
178	Binding of Escherichia coli DNA photolyase to UV-irradiated DNA. <i>Biochemistry</i> , <b>1985</b> , 24, 1849-55	3.2	68
177	Human DNA damage checkpoint protein hRAD9 is a 3Rto 5Rexonuclease. <i>Journal of Biological Chemistry</i> , <b>2000</b> , 275, 7451-4	5.4	67
176	Excited-state properties of Escherichia coli DNA photolyase in the picosecond to millisecond time scale. <i>Biochemistry</i> , <b>1990</b> , 29, 5694-8	3.2	67
175	Identification of the different intermediates in the interaction of (A)BC excinuclease with its substrates by DNase I footprinting on two uniquely modified oligonucleotides. <i>Journal of Molecular Biology</i> , <b>1991</b> , 219, 27-36	6.5	67
174	RecA-dependent incision of psoralen-crosslinked DNA by (A)BC excinuclease. <i>Nucleic Acids Research</i> , <b>1991</b> , 19, 657-63	20.1	66
173	Active site of Escherichia coli DNA photolyase: mutations at Trp277 alter the selectivity of the enzyme without affecting the quantum yield of photorepair. <i>Biochemistry</i> , <b>1990</b> , 29, 5698-706	3.2	66
172	Reconstitution of Escherichia coli photolyase with flavins and flavin analogues. <i>Biochemistry</i> , <b>1990</b> , 29, 5706-11	3.2	66
171	Identification of oligothymidylates as new simple substrates for Escherichia coli DNA photolyase and their use in a rapid spectrophotometric enzyme assay. <i>Biochemistry</i> , <b>1985</b> , 24, 1856-61	3.2	66
170	Blue-light-receptive cryptochrome is expressed in a sponge eye lacking neurons and opsin. <i>Journal of Experimental Biology</i> , <b>2012</b> , 215, 1278-86	3	65
169	Ultrafast solvation dynamics at binding and active sites of photolyases. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2010</b> , 107, 2914-9	11.5	63
168	Mechanism of release and fate of excised oligonucleotides during nucleotide excision repair. Journal of Biological Chemistry, <b>2012</b> , 287, 22889-99	5.4	63
167	LexA protein inhibits transcription of the E. coli uvrA gene in vitro. <i>Nature</i> , <b>1982</b> , 298, 96-8	50.4	63

166	Recruitment of DNA damage checkpoint proteins to damage in transcribed and nontranscribed sequences. <i>Molecular and Cellular Biology</i> , <b>2006</b> , 26, 39-49	4.8	62
165	Nucleotide excision repair in human cells: fate of the excised oligonucleotide carrying DNA damage in vivo. <i>Journal of Biological Chemistry</i> , <b>2013</b> , 288, 20918-20926	5.4	61
164	Cloning of the phr gene and amplification of photolyase in Escherichia coli. <i>Gene</i> , <b>1978</b> , 4, 295-308	3.8	61
163	RNA polymerase: the most specific damage recognition protein in cellular responses to DNA damage?. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2007</b> , 104, 13213-4	11.5	60
162	Human claspin is a ring-shaped DNA-binding protein with high affinity to branched DNA structures. Journal of Biological Chemistry, <b>2004</b> , 279, 39289-95	5.4	60
161	Interactions of human mismatch repair proteins MutSalpha and MutLalpha with proteins of the ATR-Chk1 pathway. <i>Journal of Biological Chemistry</i> , <b>2010</b> , 285, 5974-82	5.4	59
160	Reconstitution of a human ATR-mediated checkpoint response to damaged DNA. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2007</b> , 104, 13301-6	11.5	59
159	Structure and function of the (A)BC excinuclease of Escherichia coli. <i>Mutation Research DNA Repair</i> , <b>1990</b> , 236, 203-11		58
158	Purification and characterization of Escherichia coli and human nucleotide excision repair enzyme systems. <i>Methods in Enzymology</i> , <b>2006</b> , 408, 189-213	1.7	57
157	Photolyase and cryptochrome blue-light photoreceptors. <i>Advances in Protein Chemistry</i> , <b>2004</b> , 69, 73-1	00	57
156	Photochemical properties of Escherichia coli DNA photolyase: a flash photolysis study. <i>Biochemistry</i> , <b>1986</b> , 25, 8163-6	3.2	57
155	Electron tunneling pathways and role of adenine in repair of cyclobutane pyrimidine dimer by DNA photolyase. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 8104-14	16.4	56
154	Cdc7-Dbf4 and the human S checkpoint response to UVC. Journal of Biological Chemistry, 2007, 282, 94	15 <del>§.</del> Ձ46	856
153	Xeroderma pigmentosum group C splice mutation associated with autism and hypoglycinemia. Journal of Investigative Dermatology, 1998, 111, 791-6	4.3	54
152	Effect of damage type on stimulation of human excision nuclease by SWI/SNF chromatin remodeling factor. <i>Molecular and Cellular Biology</i> , <b>2003</b> , 23, 4121-5	4.8	54
151	Genome-wide transcription-coupled repair in is mediated by the Mfd translocase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, E2116-E2125	11.5	53
150	Electrically monitoring DNA repair by photolyase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 10788-92	11.5	53
149	Human genome-wide repair map of DNA damage caused by the cigarette smoke carcinogen benzo[a]pyrene. <i>Proceedings of the National Academy of Sciences of the United States of America</i> ,	11.5	51

148	Circadian clock disruption improves the efficacy of chemotherapy through p73-mediated apoptosis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2011</b> , 108, 10668-72	11.5	51	
147	Similar nucleotide excision repair capacity in melanocytes and melanoma cells. <i>Cancer Research</i> , <b>2010</b> , 70, 4922-30	10.1	50	
146	Xeroderma pigmentosum complementation group E protein (XPE/DDB2): purification of various complexes of XPE and analyses of their damaged DNA binding and putative DNA repair properties. <i>Molecular and Cellular Biology</i> , <b>2005</b> , 25, 9784-92	4.8	50	
145	Utilization of DNA photolyase, pyrimidine dimer endonucleases, and alkali hydrolysis in the analysis of aberrant ABC excinuclease incisions adjacent to UV-induced DNA photoproducts. <i>Nucleic Acids Research</i> , <b>1987</b> , 15, 1227-43	20.1	50	
144	Comparative photochemistry of animal type 1 and type 4 cryptochromes. <i>Biochemistry</i> , <b>2009</b> , 48, 8585-	-93.2	49	
143	Expression of the blue-light receptor cryptochrome in the human retina. <i>Investigative Ophthalmology and Visual Science</i> , <b>2003</b> , 44, 4515-21		49	
142	Cisplatin-DNA adduct repair of transcribed genes is controlled by two circadian programs in mouse tissues. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, E47	7 <del>7-</del> E47	8 <del>\$</del> 8	
141	Identification and amplification of the E. coli phr gene product. <i>Nucleic Acids Research</i> , <b>1983</b> , 11, 6667-7	<b>78</b> 20.1	48	
140	Identification and characterization of human MUS81-MMS4 structure-specific endonuclease. <i>Journal of Biological Chemistry</i> , <b>2003</b> , 278, 21715-20	5.4	47	
139	Purification and properties of human blue-light photoreceptor cryptochrome 2. <i>Biochemistry</i> , <b>2003</b> , 42, 2926-32	3.2	47	
138	Coupling of human DNA excision repair and the DNA damage checkpoint in a defined in vitro system. <i>Journal of Biological Chemistry</i> , <b>2014</b> , 289, 5074-82	5.4	45	
137	Molecular mechanisms and genomic maps of DNA excision repair in and humans. <i>Journal of Biological Chemistry</i> , <b>2017</b> , 292, 15588-15597	5.4	45	
136	Ramshackle (Brwd3) promotes light-induced ubiquitylation of Drosophila Cryptochrome by DDB1-CUL4-ROC1 E3 ligase complex. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, 4980-5	11.5	45	
135	Purification and partial characterization of (6-4) photoproduct DNA photolyase from Xenopus laevis. <i>Photochemistry and Photobiology</i> , <b>1996</b> , 63, 292-5	3.6	45	
134	Structure and function of DNA photolyases. <i>Trends in Biochemical Sciences</i> , <b>1987</b> , 12, 259-261	10.3	45	
133	The circadian clock controls sunburn apoptosis and erythema in mouse skin. <i>Journal of Investigative Dermatology</i> , <b>2015</b> , 135, 1119-1127	4.3	44	
132	Repair of DNA-protein cross-links in mammalian cells. <i>Cell Cycle</i> , <b>2006</b> , 5, 1366-70	4.7	44	
131	Analysis of autophosphorylating kinase activities of Arabidopsis and human cryptochromes. <i>Biochemistry</i> , <b>2006</b> , 45, 13369-74	3.2	44	

130	Long patch base excision repair proceeds via coordinated stimulation of the multienzyme DNA repair complex. <i>Journal of Biological Chemistry</i> , <b>2009</b> , 284, 15158-72	5.4	43
129	Ultrafast dynamics of resonance energy transfer in cryptochrome. <i>Journal of the American Chemical Society</i> , <b>2005</b> , 127, 7984-5	16.4	43
128	Removal of psoralen monoadducts and crosslinks by human cell free extracts. <i>Nucleic Acids Research</i> , <b>1991</b> , 19, 4623-9	20.1	43
127	SREBP1c-CRY1 signalling represses hepatic glucose production by promoting FOXO1 degradation during refeeding. <i>Nature Communications</i> , <b>2016</b> , 7, 12180	17.4	42
126	The molecular origin of high DNA-repair efficiency by photolyase. <i>Nature Communications</i> , <b>2015</b> , 6, 7302	217.4	42
125	Gene model 129 (Gm129) encodes a novel transcriptional repressor that modulates circadian gene expression. <i>Journal of Biological Chemistry</i> , <b>2014</b> , 289, 5013-24	5.4	42
124	Human transcription release factor 2 dissociates RNA polymerases I and II stalled at a cyclobutane thymine dimer. <i>Journal of Biological Chemistry</i> , <b>1999</b> , 274, 24779-86	5.4	42
123	The other function of DNA photolyase: stimulation of excision repair of chemical damage to DNA. <i>Biochemistry</i> , <b>1995</b> , 34, 15886-9	3.2	42
122	Characterization of a medium wavelength type DNA photolyase: purification and properties of photolyase from Bacillus firmus. <i>Biochemistry</i> , <b>1994</b> , 33, 8712-8	3.2	42
121	Evidence from photoinduced EPR for a radical intermediate during photolysis of cyclobutane thymine dimer by DNA photolyase. <i>Journal of the American Chemical Society</i> , <b>1992</b> , 114, 4442-4443	16.4	42
120	Femtosecond dynamics of flavin cofactor in DNA photolyase: radical reduction, local solvation, and charge recombination. <i>Journal of Physical Chemistry B</i> , <b>2005</b> , 109, 1329-33	3.4	41
119	Clocks, cancer, and chronochemotherapy. <i>Science</i> , <b>2021</b> , 371,	33.3	41
118	UV Light Potentiates STING (Stimulator of Interferon Genes)-dependent Innate Immune Signaling through Deregulation of ULK1 (Unc51-like Kinase 1). <i>Journal of Biological Chemistry</i> , <b>2015</b> , 290, 12184-9	4 <sup>5.4</sup>	40
117	Dynamic determination of the functional state in photolyase and the implication for cryptochrome. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, 12972-7	11.5	40
116	Doublet-quartet intersystem crossing of flavin radical in DNA photolyase. <i>Journal of the American Chemical Society</i> , <b>1989</b> , 111, 5967-5969	16.4	40
115	A general approach for purifying proteins encoded by cloned genes without using a functional assay: isolation of the uvrA gene product from radiolabeled maxicells. <i>Nucleic Acids Research</i> , <b>1981</b> , 9, 4495-508	20.1	40
114	Reconstitution of human claspin-mediated phosphorylation of Chk1 by the ATR (ataxia telangiectasia-mutated and rad3-related) checkpoint kinase. <i>Journal of Biological Chemistry</i> , <b>2009</b> , 284, 33107-14	5.4	39
113	Mechanism of stimulation of human DNA ligase I by the Rad9-rad1-Hus1 checkpoint complex. Journal of Biological Chemistry, <b>2006</b> , 281, 20865-20872	5.4	38

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112	Purification and characterization of a type III photolyase from Caulobacter crescentus. <i>Biochemistry</i> , <b>2008</b> , 47, 10255-61	3.2	37
111	Femtochemistry in enzyme catalysis: DNA photolyase. <i>Cell Biochemistry and Biophysics</i> , <b>2007</b> , 48, 32-44	3.2	37
110	Human and E.coli excinucleases are affected differently by the sequence context of acetylaminofluorene-guanine adduct. <i>Nucleic Acids Research</i> , <b>1994</b> , 22, 4869-71	20.1	37
109	Effect of circadian clock mutations on DNA damage response in mammalian cells. <i>Cell Cycle</i> , <b>2012</b> , 11, 3481-91	4.7	36
108	Cooperative activation of the ATR checkpoint kinase by TopBP1 and damaged DNA. <i>Nucleic Acids Research</i> , <b>2009</b> , 37, 1501-9	20.1	36
107	Mechanism of photosignaling by Drosophila cryptochrome: role of the redox status of the flavin chromophore. <i>Journal of Biological Chemistry</i> , <b>2014</b> , 289, 4634-42	5.4	35
106	Nucleotide excision repair in the third kingdom. <i>Journal of Bacteriology</i> , <b>1998</b> , 180, 5796-8	3.5	35
105	Bifurcating electron-transfer pathways in DNA photolyases determine the repair quantum yield. <i>Science</i> , <b>2016</b> , 354, 209-213	33.3	34
104	Cryptochromes and circadian photoreception in animals. <i>Methods in Enzymology</i> , <b>2005</b> , 393, 726-45	1.7	34
103	Analysis of mRNA synthesis following induction of the Escherichia coli SOS system. <i>Journal of Molecular Biology</i> , <b>1984</b> , 178, 237-48	6.5	34
102	Formation of Arabidopsis Cryptochrome 2 photobodies in mammalian nuclei: application as an optogenetic DNA damage checkpoint switch. <i>Journal of Biological Chemistry</i> , <b>2013</b> , 288, 23244-51	5.4	32
101	The second chromophore in Drosophila photolyase/cryptochrome family photoreceptors. <i>Biochemistry</i> , <b>2012</b> , 51, 167-71	3.2	32
100	Thermodynamic Cooperativity and Kinetic Proofreading in DNA Damage Recognition and Repair. <i>Cell Cycle</i> , <b>2004</b> , 3, 139-142	4.7	32
99	Circadian photoreception in humans and mice. <i>Molecular Interventions: Pharmacological Perspectives From Biology, Chemistry and Genomics</i> , <b>2002</b> , 2, 484-92		32
98	Highly specific and sensitive method for measuring nucleotide excision repair kinetics of ultraviolet photoproducts in human cells. <i>Nucleic Acids Research</i> , <b>2014</b> , 42, e29	20.1	31
97	Cloning, sequencing, expression and characterization of DNA photolyase from Salmonella typhimurium. <i>Nucleic Acids Research</i> , <b>1991</b> , 19, 4885-90	20.1	31
96	The repair patch of E. coli (A)BC excinuclease. <i>Nucleic Acids Research</i> , <b>1990</b> , 18, 5051-3	20.1	31
95	Mfd translocase is necessary and sufficient for transcription-coupled repair in. <i>Journal of Biological Chemistry</i> , <b>2017</b> , 292, 18386-18391	5.4	30

94	RHINO forms a stoichiometric complex with the 9-1-1 checkpoint clamp and mediates ATR-Chk1 signaling. <i>Cell Cycle</i> , <b>2015</b> , 14, 99-108	4.7	30
93	DNA damage-specific control of cell death by cryptochrome in p53-mutant ras-transformed cells. <i>Cancer Research</i> , <b>2013</b> , 73, 785-91	10.1	30
92	Tethering DNA damage checkpoint mediator proteins topoisomerase IIbeta-binding protein 1 (TopBP1) and Claspin to DNA activates ataxia-telangiectasia mutated and RAD3-related (ATR) phosphorylation of checkpoint kinase 1 (Chk1). <i>Journal of Biological Chemistry</i> , <b>2011</b> , 286, 19229-36	5.4	30
91	RNA polymerase II is released from the DNA template during transcription-coupled repair in mammalian cells. <i>Journal of Biological Chemistry</i> , <b>2018</b> , 293, 2476-2486	5.4	29
90	Molecular cloning of a novel human gene encoding a 63-kDa protein and its sublocalization within the 11q13 locus. <i>Genomics</i> , <b>1997</b> , 41, 397-405	4.3	29
89	A Third Member of the Photolyase/Blue-light Photoreceptor Family in Drosophila: A Putative Circadian Photoreceptor. <i>Photochemistry and Photobiology</i> , <b>1999</b> , 69, 105-107	3.6	29
88	High-performance liquid chromatographic separation of platinum complexes containing the cis-1,2-diaminocyclohexane carrier ligand. <i>Analytical Biochemistry</i> , <b>1986</b> , 157, 129-43	3.1	29
87	Properties and regulation of the UVRABC endonuclease. <i>Biochimie</i> , <b>1982</b> , 64, 595-8	4.6	29
86	A mathematical model for human nucleotide excision repair: damage recognition by random order assembly and kinetic proofreading. <i>Journal of Theoretical Biology</i> , <b>2007</b> , 249, 361-75	2.3	27
85	Pleiotropic effects of cryptochromes 1 and 2 on free-running and light-entrained murine circadian rhythms. <i>Journal of Neurogenetics</i> , <b>2002</b> , 16, 181-203	1.6	27
84	Tryptophan radical formation in DNA photolyase: electron-spin polarization arising from photoexcitation of a doublet ground state. <i>Journal of the American Chemical Society</i> , <b>1993</b> , 115, 1602-1	603 <sup>.4</sup>	27
83	DNA repair synthesis and ligation affect the processing of excised oligonucleotides generated by human nucleotide excision repair. <i>Journal of Biological Chemistry</i> , <b>2014</b> , 289, 26574-26583	5.4	26
82	The influence of repair pathways on the cytotoxicity and mutagenicity induced by the pyridyloxobutylation pathway of tobacco-specific nitrosamines. <i>Chemical Research in Toxicology</i> , <b>2009</b> , 22, 1464-72	4	26
81	The DNA damage response kinases DNA-dependent protein kinase (DNA-PK) and ataxia telangiectasia mutated (ATM) Are stimulated by bulky adduct-containing DNA. <i>Journal of Biological Chemistry</i> , <b>2011</b> , 286, 19237-46	5.4	26
80	DNA excision repair: where do all the dimers go?. Cell Cycle, 2012, 11, 2997-3002	4.7	26
79	An Integrated Approach for Analysis of the DNA Damage Response in Mammalian Cells: NUCLEOTIDE EXCISION REPAIR, DNA DAMAGE CHECKPOINT, AND APOPTOSIS. <i>Journal of Biological Chemistry</i> , <b>2015</b> , 290, 28812-21	5.4	25
78	ATR Kinase Inhibition Protects Non-cycling Cells from the Lethal Effects of DNA Damage and Transcription Stress. <i>Journal of Biological Chemistry</i> , <b>2016</b> , 291, 9330-42	5.4	25
77	DNA photolyase repairs the trans-syn cyclobutane thymine dimer. <i>Biochemistry</i> , <b>1993</b> , 32, 7065-8	3.2	25

76	Laser Flash Photolysis on an Intermediate in the Repair of Pyrimidine Dimers by DNA Photolyase. Journal of the American Chemical Society, <b>1994</b> , 116, 3115-3116	16.4	25	
75	Photorepair of nonadjacent pyrimidine dimers by DNA photolyase. <i>Photochemistry and Photobiology</i> , <b>1995</b> , 61, 171-4	3.6	25	
74	Nucleotide excision repair by dual incisions in plants. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, 4706-10	11.5	24	
73	Genome-wide excision repair in Arabidopsis is coupled to transcription and reflects circadian gene expression patterns. <i>Nature Communications</i> , <b>2018</b> , 9, 1503	17.4	23	
72	Single-nucleotide resolution dynamic repair maps of UV damage in genome. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, E3408-E3415	11.5	22	
71	Effect of vitamin A depletion on nonvisual phototransduction pathways in cryptochromeless mice. <i>Journal of Biological Rhythms</i> , <b>2004</b> , 19, 504-17	3.2	22	
70	Further evidence for the role of cryptochromes in retinohypothalamic photoreception/phototransduction. <i>Molecular Brain Research</i> , <b>2004</b> , 122, 158-66		22	
69	Purification and characterization of Drosophila melanogaster photolyase. <i>Mutation Research DNA Repair</i> , <b>1996</b> , 363, 97-104		22	
68	Genome-wide mapping of nucleotide excision repair with XR-seq. <i>Nature Protocols</i> , <b>2019</b> , 14, 248-282	18.8	22	
67	An alternative form of replication protein a expressed in normal human tissues supports DNA repair. <i>Journal of Biological Chemistry</i> , <b>2010</b> , 285, 4788-97	5.4	21	
66	Role of tryptophans in substrate binding and catalysis by DNA photolyase. <i>Methods in Enzymology</i> , <b>1995</b> , 258, 319-43	1.7	21	
65	Thermodynamic cooperativity and kinetic proofreading in DNA damage recognition and repair. <i>Cell Cycle</i> , <b>2004</b> , 3, 141-4	4.7	21	
64	In vitro analysis of the role of replication protein A (RPA) and RPA phosphorylation in ATR-mediated checkpoint signaling. <i>Journal of Biological Chemistry</i> , <b>2012</b> , 287, 36123-31	5.4	20	
63	The human ATR-mediated DNA damage checkpoint in a reconstituted system. <i>Methods</i> , <b>2009</b> , 48, 3-7	4.6	19	
62	Direct determination of resonance energy transfer in photolyase: structural alignment for the functional state. <i>Journal of Physical Chemistry A</i> , <b>2014</b> , 118, 10522-30	2.8	18	
61	The human Rad9 checkpoint protein stimulates the carbamoyl phosphate synthetase activity of the multifunctional protein CAD. <i>Nucleic Acids Research</i> , <b>2004</b> , 32, 4524-30	20.1	18	
60	Methodologies for detecting environmentally induced DNA damage and repair. <i>Environmental and Molecular Mutagenesis</i> , <b>2020</b> , 61, 664-679	3.2	17	
59	, which lacks canonical transcription-coupled repair proteins, performs transcription-coupled repair.  Journal of Biological Chemistry, <b>2019</b> , 294, 18092-18098	5.4	17	

58	Photoreactivation of killing in E. coli K-12 phr- cells is not caused by pyrimidine dimer reversal. <i>Photochemistry and Photobiology</i> , <b>1988</b> , 48, 233-4	3.6	17
57	Molecular mechanism of the repressive phase of the mammalian circadian clock. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2021</b> , 118,	11.5	17
56	Reconstitution of mammalian excision repair activity with mutant cell-free extracts and XPAC and ERCC1 proteins expressed in Escherichia coli. <i>Nucleic Acids Research</i> , <b>1993</b> , 21, 5110-6	20.1	16
55	CRY1-CBS binding regulates circadian clock function and metabolism. <i>FEBS Journal</i> , <b>2021</b> , 288, 614-639	5.7	16
54	Comparative properties and functions of type 2 and type 4 pigeon cryptochromes. <i>Cellular and Molecular Life Sciences</i> , <b>2018</b> , 75, 4629-4641	10.3	16
53	Analysis of Ribonucleotide Removal from DNA by Human Nucleotide Excision Repair. <i>Journal of Biological Chemistry</i> , <b>2015</b> , 290, 29801-7	5.4	14
52	Direct role for the replication protein treslin (Ticrr) in the ATR kinase-mediated checkpoint response. <i>Journal of Biological Chemistry</i> , <b>2013</b> , 288, 18903-10	5.4	14
51	Purification and characterization of DNA photolyases. <i>Methods in Enzymology</i> , <b>2006</b> , 408, 121-56	1.7	14
50	The LexA protein does not bind specifically to the two SOS box-like sequences immediately 5Rto the phr gene. <i>Mutation Research DNA Repair</i> , <b>1989</b> , 218, 207-10		14
49	The circadian clock shapes the s transcriptome by regulating alternative splicing and alternative polyadenylation. <i>Journal of Biological Chemistry</i> , <b>2020</b> , 295, 7608-7619	5.4	12
48	CRYPTOCHROMES confer robustness, not rhythmicity, to circadian timekeeping. <i>EMBO Journal</i> , <b>2021</b> , 40, e106745	13	12
47	DNA distress: just ring 9-1-1. Current Biology, <b>2009</b> , 19, R733-4	6.3	11
46	Crystallization and preliminary crystallographic analysis of Escherichia coli DNA photolyase. <i>Journal of Molecular Biology</i> , <b>1993</b> , 231, 1122-5	6.5	11
45	Multiple ATR-Chk1 pathway proteins preferentially associate with checkpoint-inducing DNA substrates. <i>PLoS ONE</i> , <b>2011</b> , 6, e22986	3.7	11
44	Single-nucleotide resolution analysis of nucleotide excision repair of ribosomal DNA in humans and mice. <i>Journal of Biological Chemistry</i> , <b>2019</b> , 294, 210-217	5.4	11
43	Long-term, genome-wide kinetic analysis of the effect of the circadian clock and transcription on the repair of cisplatin-DNA adducts in the mouse liver. <i>Journal of Biological Chemistry</i> , <b>2019</b> , 294, 11960	-14968	10
42	Nucleotide excision repair, oxidative damage, DNA sequence polymorphisms, and cancer treatment. <i>Clinical Cancer Research</i> , <b>2005</b> , 11, 1355-7	12.9	10
41	Restoration of nucleotide excision repair in a helicase-deficient XPD mutant from intragenic suppression by a trichothiodystrophy mutation. <i>Molecular and Cellular Biology</i> , <b>2001</b> , 21, 7355-65	4.8	9

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40	Nucleotide excision repair capacity increases during differentiation of human embryonic carcinoma cells into neurons and muscle cells. <i>Journal of Biological Chemistry</i> , <b>2019</b> , 294, 5914-5922	5.4	8
39	Genome-wide single-nucleotide resolution of oxaliplatin-DNA adduct repair in drug-sensitive and -resistant colorectal cancer cell lines. <i>Journal of Biological Chemistry</i> , <b>2020</b> , 295, 7584-7594	5.4	8
38	Resonance Raman spectroscopic investigation of the light-harvesting chromophore in escherichia coli photolyase and Vibrio cholerae cryptochrome-1. <i>Biochemistry</i> , <b>2007</b> , 46, 3673-81	3.2	8
37	Limitations of the in vitro repair synthesis assay for probing the role of DNA repair in platinum resistance. <i>Chemico-Biological Interactions</i> , <b>1992</b> , 81, 223-31	5	8
36	It Is Chemistry but Not Your Grandfather & Chemistry. Biochemistry, 2017, 56, 1-2	3.2	7
35	Characterization of transcription-repair coupling factors in E. coli and humans. <i>Methods in Enzymology</i> , <b>2003</b> , 371, 300-24	1.7	7
34	Flow linear dichroism and electron microscopic analysis of protein-DNA complexes of a mutant UvrB protein that binds to but cannot kink DNA. <i>Journal of Molecular Biology</i> , <b>1994</b> , 241, 645-50	6.5	7
33	Mechanismen der DNA-Reparatur durch Photolyasen und Exzisionsnukleasen (Nobel-Aufsatz). <i>Angewandte Chemie</i> , <b>2016</b> , 128, 8643-8670	3.6	7
32	The 2015 Nobel Prize in Chemistry The Discovery of Essential Mechanisms that Repair DNA Damage. <i>Journal of the Association of Genetic Technologists</i> , <b>2016</b> , 42, 37-41	0.1	7
31	DNA excision repair assays. <i>Progress in Molecular Biology and Translational Science</i> , <b>1997</b> , 56, 63-81		6
30	Excited quartet states in DNA photolyase. <i>Journal of Photochemistry and Photobiology B: Biology</i> , <b>1992</b> , 16, 387-90	6.7	6
29	A Third Member of the Photolyase/Blue-light Photoreceptor Family in Drosophila: A Putative Circadian Photoreceptor <b>1999</b> , 69, 105		6
28	Circadian regulation of c-MYC in mice. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 21609-21617	11.5	5
27	Genome-wide circadian rhythm detection methods: systematic evaluations and practical guidelines. <i>Briefings in Bioinformatics</i> , <b>2021</b> , 22,	13.4	5
26	Cryptochromes and Inner Retinal Non-Visual Irradiance Detection. <i>Novartis Foundation Symposium</i> , <b>2008</b> , 31-51		4
25	Super hotspots and super coldspots in the repair of UV-induced DNA damage in the human genome. <i>Journal of Biological Chemistry</i> , <b>2021</b> , 296, 100581	5.4	4
24	DCAF7 is required for maintaining the cellular levels of ERCC1-XPF and nucleotide excision repair. <i>Biochemical and Biophysical Research Communications</i> , <b>2019</b> , 519, 204-210	3.4	3
23	Genome-wide analysis of 8-oxo-7,8-dihydro-2Rdeoxyguanosine at single-nucleotide resolution unveils reduced occurrence of oxidative damage at G-quadruplex sites. <i>Nucleic Acids Research</i> , <b>2021</b> , 49, 12252-12267	20.1	3

22	Mycobacteria excise DNA damage in 12- or 13-nucleotide-long oligomers by prokaryotic-type dual incisions and performs transcription-coupled repair. <i>Journal of Biological Chemistry</i> , <b>2020</b> , 295, 17374-17	7 <del>58</del> 0	3
21	Nucleotide excision repair hotspots and coldspots of UV-induced DNA damage in the human genome		3
20	Circadian clock, carcinogenesis, chronochemotherapy connections. <i>Journal of Biological Chemistry</i> , <b>2021</b> , 297, 101068	5.4	3
19	Mechanistic Study of TTF-1 Modulation of Cellular Sensitivity to Cisplatin. <i>Scientific Reports</i> , <b>2019</b> , 9, 79	<b>94</b> .9	2
18	Animal Cryptochromes <b>2005</b> , 259-276		2
17	The Transcription-Repair Coupling Factor Mfd Prevents and Promotes Mutagenesis in a Context-Dependent Manner. <i>Frontiers in Molecular Biosciences</i> , <b>2021</b> , 8, 668290	5.6	2
16	Oliver Smithies (1925-2017). <i>Science</i> , <b>2017</b> , 355, 695	33.3	1
15	Claud S. Rupert (1919-2017): The Father of DNA Repair. <i>Photochemistry and Photobiology</i> , <b>2017</b> , 93, 113	35.16134	41
14	Generation and characterization of an immortal cell line of xeroderma pigmentosum group E. <i>Mutation Research DNA Repair</i> , <b>1998</b> , 407, 55-65		1
13	Genome-wide circadian rhythm detection methods: systematic evaluations and practical guidelines		1
12	Comparative analyses of two primate species diverged by more than 60 million years show different rates but similar distribution of genome-wide UV repair events		1
11	CRYPTOCHROMES confer robustness, not rhythmicity, to circadian timekeeping		1
10	Coupling of Human DNA Excision Repair and the ATR-mediated DNA Damage Checkpoint. <i>FASEB Journal</i> , <b>2015</b> , 29, 490.1	0.9	1
9	A Sextuple Knockout Cell Line System to Study the Differential Roles of CRY, PER, and NR1D in the Transcription-Translation Feedback Loop of the Circadian Clock. <i>Frontiers in Neuroscience</i> , <b>2020</b> , 14, 616	80 <u>7</u>	1
8	Comparative analyses of two primate species diverged by more than 60 million years show different rates but similar distribution of genome-wide UV repair events. <i>BMC Genomics</i> , <b>2021</b> , 22, 600	4.5	1
7	Biography. <i>Photochemistry and Photobiology</i> , <b>2017</b> , 93, 7-14	3.6	
6	Preface. Photochemistry and Photobiology, <b>2017</b> , 93, 4	3.6	
5	DNA Photolyase <b>2004</b> , 698-702		

#### LIST OF PUBLICATIONS

4	Long Patch Base Excision Repair proceeds via coordinated stimulation of the multienzyme repair complex. <i>FASEB Journal</i> , <b>2009</b> , 23, 836.13	0.9
3	Interactions of human mismatch repair proteins MutSalpha and MutLalpha with proteins of the ATR-Chk1 pathway. <i>FASEB Journal</i> , <b>2010</b> , 24, 492.10	0.9
2	My 100th JBC paper. Journal of Biological Chemistry, 2021, 296, 100061	5.4
1	A new technique for genome-wide mapping of nucleotide excision repair without immunopurification of damaged DNA <i>Journal of Biological Chemistry</i> , <b>2022</b> , 101863	5.4