## Graham C Walker

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/9685834/publications.pdf Version: 2024-02-01



#	Article	IF	CITATIONS
1	Mutagenesis and inducible responses to deoxyribonucleic acid damage in Escherichia coli. Microbiological Reviews, 1984, 48, 60-93.	10.1	1,645
2	Mechanisms of DNA damage, repair, and mutagenesis. Environmental and Molecular Mutagenesis, 2017, 58, 235-263.	0.9	1,129
3	A genetic basis for Pseudomonas aeruginosa biofilm antibiotic resistance. Nature, 2003, 426, 306-310.	13.7	1,036
4	Mutagenesis and inducible responses to deoxyribonucleic acid damage in Escherichia coli Microbiological Reviews, 1984, 48, 60-93.	10.1	895
5	The Y-Family of DNA Polymerases. Molecular Cell, 2001, 8, 7-8.	4.5	798
6	How rhizobial symbionts invade plants: the Sinorhizobium–Medicago model. Nature Reviews Microbiology, 2007, 5, 619-633.	13.6	781
7	Antibiotics induce redox-related physiological alterations as part of their lethality. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E2100-9.	3.3	698
8	Exopolysaccharide-deficient mutants of Rhizobium meliloti that form ineffective nodules Proceedings of the National Academy of Sciences of the United States of America, 1985, 82, 6231-6235.	3.3	596
9	DNA Repair and Mutagenesis. , 2005, , .		591
10	Inducible DNA Repair Systems. Annual Review of Biochemistry, 1985, 54, 425-457.	5.0	588
11	DNA-damaging agents stimulate gene expression at specific loci in Escherichia coli Proceedings of the National Academy of Sciences of the United States of America, 1980, 77, 2819-2823.	3.3	527
12	Eukaryotic Translesion Polymerases and Their Roles and Regulation in DNA Damage Tolerance. Microbiology and Molecular Biology Reviews, 2009, 73, 134-154.	2.9	502
13	Succinoglycan Is Required for Initiation and Elongation of Infection Threads during Nodulation of Alfalfa by <i>Rhizobium meliloti</i> . Journal of Bacteriology, 1998, 180, 5183-5191.	1.0	448
14	Oxidation of the Guanine Nucleotide Pool Underlies Cell Death by Bactericidal Antibiotics. Science, 2012, 336, 315-319.	6.0	400
15	Bactericidal Antibiotics Induce Toxic Metabolic Perturbations that Lead to Cellular Damage. Cell Reports, 2015, 13, 968-980.	2.9	393
16	RecA-mediated cleavage activates UmuD for mutagenesis: mechanistic relationship between transcriptional derepression and posttranslational activation Proceedings of the National Academy of Sciences of the United States of America, 1988, 85, 1816-1820.	3.3	383
17	Symbiotic mutants of rhizobium meliloti that uncouple plant from bacterial differentiation. Cell, 1985, 40, 869-877.	13.5	348
18	Molecular Determinants of a Symbiotic Chronic Infection. Annual Review of Genetics, 2008, 42, 413-441.	3.2	326

2

#	Article	IF	CITATIONS
19	Proteins required for ultraviolet light and chemical mutagenesis. Journal of Molecular Biology, 1983, 164, 175-192.	2.0	306
20	Enhancing tumor cell response to chemotherapy through nanoparticle-mediated codelivery of siRNA and cisplatin prodrug. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 18638-18643.	3.3	302
21	Biosynthesis of succinoglycan, a symbiotically important exopolysaccharide of Rhizobium meliloti. Cell, 1993, 74, 269-280.	13.5	296
22	A novel exopolysaccharide can function in place of the Calcofluor-binding exopolysaccharide in nodulation of alfalfa by Rhizobium meliloti. Cell, 1989, 56, 661-672.	13.5	295
23	The Sos Response: Recent Insights intoumuDC-Dependent Mutagenesis and DNA Damage Tolerance. Annual Review of Genetics, 2000, 34, 479-497.	3.2	288
24	Inducibility of a gene product required for UV and chemical mutagenesis in Escherichia coli Proceedings of the National Academy of Sciences of the United States of America, 1981, 78, 5749-5753.	3.3	278
25	General transduction in Rhizobium meliloti. Journal of Bacteriology, 1984, 159, 120-124.	1.0	274
26	Degradation of carboxy-terminal-tagged cytoplasmic proteins by the Escherichia coli protease HflB (FtsH). Genes and Development, 1998, 12, 1348-1355.	2.7	255
27	Rhizobium meliloti mutants that fail to succinylate their Calcofluor-binding exopolysaccharide are defective in nodule invasion. Cell, 1987, 51, 579-587.	13.5	243
28	Escherichia coli dnaK null mutants are inviable at high temperature. Journal of Bacteriology, 1987, 169, 283-290.	1.0	241
29	New recA mutations that dissociate the various RecA protein activities in Escherichia coli provide evidence for an additional role for RecA protein in UV mutagenesis. Journal of Bacteriology, 1989, 171, 2415-2423.	1.0	240
30	Cellular defects caused by deletion of the Escherichia coli dnaK gene indicate roles for heat shock protein in normal metabolism. Journal of Bacteriology, 1989, 171, 2337-2346.	1.0	236
31	A single amino acid governs enhanced activity of DinB DNA polymerases on damaged templates. Nature, 2006, 439, 225-228.	13.7	227
32	A White-Box Machine Learning Approach for Revealing Antibiotic Mechanisms of Action. Cell, 2019, 177, 1649-1661.e9.	13.5	227
33	umuDC and mucAB operons whose products are required for UV light- and chemical-induced mutagenesis: UmuD, MucA, and LexA proteins share homology Proceedings of the National Academy of Sciences of the United States of America, 1985, 82, 4331-4335.	3.3	222
34	Unraveling the Physiological Complexities of Antibiotic Lethality. Annual Review of Pharmacology and Toxicology, 2015, 55, 313-332.	4.2	222
35	DnaK as a thermometer: threonine-199 is site of autophosphorylation and is critical for ATPase activity Proceedings of the National Academy of Sciences of the United States of America, 1991, 88, 9513-9517.	3.3	216
36	Expression of the E. coli uvrA gene is inducible. Nature, 1981, 289, 808-810.	13.7	210

#	Article	IF	CITATIONS
37	Genes needed for the modification, polymerization, export, and processing of succinoglycan by Rhizobium meliloti: a model for succinoglycan biosynthesis. Journal of Bacteriology, 1993, 175, 7045-7055.	1.0	197
38	Plasmid (pKM101)-mediated enhancement of repair and mutagenesis: Dependence on chromosomal genes in Escherichia coli K-12. Molecular Genetics and Genomics, 1977, 152, 93-103.	2.4	190
39	Alfalfa Root Nodule Invasion Efficiency Is Dependent on Sinorhizobium melilotiPolysaccharides. Journal of Bacteriology, 2000, 182, 4310-4318.	1.0	190
40	Changing the Culture of Science Education at Research Universities. Science, 2011, 331, 152-153.	6.0	188
41	Identification of plasmid (pKM101)-coded proteins involved in mutagenesis and UV resistance. Nature, 1982, 300, 278-281.	13.7	186
42	Differential response of the plant <i>Medicago truncatula</i> to its symbiont <i>Sinorhizobium meliloti</i> or an exopolysaccharide-deficient mutant. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 704-709.	3.3	185
43	Error-prone translesion synthesis mediates acquired chemoresistance. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 20792-20797.	3.3	183
44	Low molecular weight EPS II of Rhizobium meliloti allows nodule invasion in Medicago sativa Proceedings of the National Academy of Sciences of the United States of America, 1996, 93, 8636-8641.	3.3	179
45	Detailed structural characterization of succinoglycan, the major exopolysaccharide of Rhizobium meliloti Rm1021. Journal of Bacteriology, 1994, 176, 1997-2002.	1.0	175
46	Managing DNA polymerases: Coordinating DNA replication, DNA repair, and DNA recombination. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 8342-8349.	3.3	170
47	Genetic analysis of a cluster of genes required for synthesis of the calcofluor-binding exopolysaccharide of Rhizobium meliloti. Journal of Bacteriology, 1988, 170, 4239-4248.	1.0	169
48	Characterization of a Novel Pyranopyridine Inhibitor of the AcrAB Efflux Pump of Escherichia coli. Antimicrobial Agents and Chemotherapy, 2014, 58, 722-733.	1.4	169
49	Hydroxyurea Induces Hydroxyl Radical-Mediated Cell Death in Escherichia coli. Molecular Cell, 2009, 36, 845-860.	4.5	168
50	A Rhizobium meliloti homolog of the Escherichia coli peptide-antibiotic transport protein SbmA is essential for bacteroid development Genes and Development, 1993, 7, 1485-1497.	2.7	167
51	Exopolysaccharides of Rhizobium: synthesis, regulation and symbiotic function. Trends in Genetics, 1994, 10, 63-67.	2.9	165
52	Rhizobium meliloti mutants that overproduce the R. meliloti acidic calcofluor-binding exopolysaccharide. Journal of Bacteriology, 1988, 170, 4249-4256.	1.0	164
53	A LuxR Homolog Controls Production of Symbiotically Active Extracellular Polysaccharide II by Sinorhizobium meliloti. Journal of Bacteriology, 2002, 184, 5067-5076.	1.0	164
54	Similar Requirements of a Plant Symbiont and a Mammalian Pathogen for Prolonged Intracellular Survival. Science, 2000, 287, 2492-2493.	6.0	162

#	Article	IF	CITATIONS
55	BluB cannibalizes flavin to form the lower ligand of vitamin B12. Nature, 2007, 446, 449-453.	13.7	160
56	Suppression of Rev3, the catalytic subunit of Polζ, sensitizes drug-resistant lung tumors to chemotherapy. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 20786-20791.	3.3	160
57	A model for a umuDC-dependent prokaryotic DNA damage checkpoint. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 9218-9223.	3.3	158
58	The critical mutagenic translesion DNA polymerase Rev1 is highly expressed during G2/M phase rather than S phase. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 8971-8976.	3.3	158
59	Mutagenesis and repair deficiencies of Escherichia coli umuC mutants are suppressed by the plasmid pKM101. Molecular Genetics and Genomics, 1979, 172, 17-24.	2.4	147
60	Succinoglycan Production by <i>Rhizobium meliloti</i> Is Regulated through the ExoS-ChvI Two-Component Regulatory System. Journal of Bacteriology, 1998, 180, 20-26.	1.0	146
61	Mutations altering heat shock specific subunit of RNA polymerase suppress major cellular defects of E. coli mutants lacking the DnaK chaperone EMBO Journal, 1990, 9, 4027-4036.	3.5	140
62	Family of glycosyl transferases needed for the synthesis of succinoglycan by Rhizobium meliloti. Journal of Bacteriology, 1993, 175, 7033-7044.	1.0	140
63	Mutagenesis and More: umuDC and the Escherichia coli SOS Response. Genetics, 1998, 148, 1599-1610.	1.2	140
64	Rhizobium meliloti exopolysaccharides: Synthesis and symbiotic function. Gene, 1996, 179, 141-146.	1.0	139
65	The 32-kilobase exp gene cluster of Rhizobium meliloti directing the biosynthesis of galactoglucan: genetic organization and properties of the encoded gene products. Journal of Bacteriology, 1997, 179, 1375-1384.	1.0	139
66	Y-family DNA polymerases in Escherichia coli. Trends in Microbiology, 2007, 15, 70-77.	3.5	137
67	The SOS Regulatory Network. EcoSal Plus, 2008, 3, .	2.1	134
68	Host plant peptides elicit a transcriptional response to control the <i>Sinorhizobium meliloti</i> cell cycle during symbiosis. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 3561-3566.	3.3	134
69	Chronic intracellular infection of alfalfa nodules bySinorhizobium melilotirequires correct lipopolysaccharide core. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 3938-3943.	3.3	129
70	Conserved Bacterial RNase YbeY Plays Key Roles in 70S Ribosome Quality Control and 16S rRNA Maturation. Molecular Cell, 2013, 49, 427-438.	4.5	127
71	A Small Molecule Targeting Mutagenic Translesion Synthesis Improves Chemotherapy. Cell, 2019, 178, 152-159.e11.	13.5	126
72	Delta dnaK52 mutants of Escherichia coli have defects in chromosome segregation and plasmid maintenance at normal growth temperatures. Journal of Bacteriology, 1989, 171, 6030-6038.	1.0	124

#	Article	IF	CITATIONS
73	Conjugal transfer system of the IncN plasmid pKM101. Journal of Bacteriology, 1985, 161, 402-410.	1.0	123
74	[19] Genetic techniques in Rhizobium meliloti. Methods in Enzymology, 1991, 204, 398-418.	0.4	122
75	Structure of the Endonuclease Domain of MutL: Unlicensed to Cut. Molecular Cell, 2010, 39, 145-151.	4.5	122
76	Structural Characterization of the Symbiotically Important Low-Molecular-Weight Succinoglycan of <i>Sinorhizobium meliloti</i> . Journal of Bacteriology, 1999, 181, 6788-6796.	1.0	120
77	Symbiotic loci of Rhizobium meliloti identified by random TnphoA mutagenesis. Journal of Bacteriology, 1988, 170, 4257-4265.	1.0	119
78	Localization of the plasmid (pKM101) gene(s) involved in recA + lexA +-dependent mutagenesis. Molecular Genetics and Genomics, 1980, 179, 289-297.	2.4	118
79	Dominant negative umuD mutations decreasing RecA-mediated cleavage suggest roles for intact UmuD in modulation of SOS mutagenesis Proceedings of the National Academy of Sciences of the United States of America, 1990, 87, 7190-7194.	3.3	118
80	Cold sensitivity induced by overproduction of UmuDC in Escherichia coli. Journal of Bacteriology, 1985, 162, 155-161.	1.0	117
81	Functional organization of plasmid pKM101. Journal of Bacteriology, 1981, 145, 1310-1316.	1.0	108
82	Cell Cycle Control by the Master Regulator CtrA in Sinorhizobium meliloti. PLoS Genetics, 2015, 11, e1005232.	1.5	105
83	Genetic manipulations in Rhizobium meliloti utilizing two new transposon Tn5 derivatives. Molecular Genetics and Genomics, 1986, 204, 485-491.	2.4	104
84	The Escherichia coli SOS mutagenesis proteins UmuD and UmuD' interact physically with the replicative DNA polymerase. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 12373-12378.	3.3	100
85	Î <sup>2</sup> Clamp Directs Localization of Mismatch Repair in Bacillus subtilis. Molecular Cell, 2008, 29, 291-301.	4.5	100
86	Biosynthetic control of molecular weight in the polymerization of the octasaccharide subunits of succinoglycan, a symbiotically important exopolysaccharide of Rhizobium meliloti. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 13477-13482.	3.3	99
87	Similarity to peroxisomal-membrane protein family reveals that Sinorhizobium and Brucella BacA affect lipid-A fatty acids. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 5012-5017.	3.3	99
88	UmuD and RecA Directly Modulate the Mutagenic Potential of the Y Family DNA Polymerase DinB. Molecular Cell, 2007, 28, 1058-1070.	4.5	99
89	Functional characterization of bacterial sRNAs using a network biology approach. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 15522-15527.	3.3	99
90	Structural Basis of Rev1-mediated Assembly of a Quaternary Vertebrate Translesion Polymerase Complex Consisting of Rev1, Heterodimeric Polymerase (Pol) ζ, and Pol κ. Journal of Biological Chemistry, 2012, 287, 33836-33846.	1.6	98

#	Article	IF	CITATIONS
91	SOS-regulated proteins in translesion DNA synthesis and mutagenesis. Trends in Biochemical Sciences, 1995, 20, 416-420.	3.7	97
92	Role of <i>Escherichia coli</i> YbeY, a highly conserved protein, in rRNA processing. Molecular Microbiology, 2010, 78, 506-518.	1.2	97
93	The Escherichia coli polB gene, which encodes DNA polymerase II, is regulated by the SOS system. Journal of Bacteriology, 1990, 172, 6268-6273.	1.0	96
94	Roles for the transcription elongation factor NusA in both DNA repair and damage tolerance pathways in <i>Escherichia coli</i> . Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 15517-15522.	3.3	96
95	Isolation and characterization of Tn5 insertion mutations in the lexA gene of Escherichia coli. Journal of Bacteriology, 1983, 153, 1368-1378.	1.0	96
96	Exogenous suppression of the symbiotic deficiencies of Rhizobium meliloti exo mutants. Journal of Bacteriology, 1992, 174, 3403-3406.	1.0	95
97	The Rhizobium meliloti exoK gene and prsD / prsE / exsH genes are components of independent degradative pathways which contribute to production of lowâ€molecularâ€weight succinoglycan. Molecular Microbiology, 1997, 25, 117-134.	1.2	92
98	Construction of an Escherichia coli K-12 ada deletion by gene replacement in a recD strain reveals a second methyltransferase that repairs alkylated DNA. Journal of Bacteriology, 1988, 170, 3294-3296.	1.0	91
99	Sinorhizobium meliloti bluB is necessary for production of 5,6-dimethylbenzimidazole, the lower ligand of B12. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 4634-4639.	3.3	91
100	Deficiency of a Sinorhizobium meliloti bacA Mutant in Alfalfa Symbiosis Correlates with Alteration of the Cell Envelope. Journal of Bacteriology, 2002, 184, 5625-5632.	1.0	89
101	Induction and autoregulation of ada, a positively acting element regulating the response of Escherichia coli K-12 to methylating agents. Journal of Bacteriology, 1985, 161, 888-895.	1.0	89
102	Structural studies of a novel exopolysaccharide produced by a mutant of Rhizobium meliloti strain Rm1021. Carbohydrate Research, 1990, 198, 305-312.	1.1	88
103	Visualization of Mismatch Repair in Bacterial Cells. Molecular Cell, 2001, 8, 1197-1206.	4.5	86
104	Rhizobium meliloti exoG and exoJ mutations affect the exoX-exoY system for modulation of exopolysaccharide production. Journal of Bacteriology, 1991, 173, 3776-3788.	1.0	85
105	Regulation of Rhizobium meliloti exo genes in free-living cells and in planta examined by using TnphoA fusions. Journal of Bacteriology, 1991, 173, 426-434.	1.0	85
106	Clobal analysis of cell cycle gene expression of the legume symbiont <i>Sinorhizobium meliloti</i> . Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 3217-3224.	3.3	85
107	The muc genes of pKM101 are induced by DNA damage. Journal of Bacteriology, 1983, 155, 1306-1315.	1.0	83
108	Rhizobial peptidase HrrP cleaves host-encoded signaling peptides and mediates symbiotic compatibility. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15244-15249.	3.3	82

#	Article	IF	CITATIONS
109	Isolation and characterization of mutants of the plasmid pKM101 deficient in their ability to enhance mutagenesis and repair. Journal of Bacteriology, 1978, 133, 1203-1211.	1.0	82
110	groE mutants of Escherichia coli are defective in umuDC-dependent UV mutagenesis. Journal of Bacteriology, 1989, 171, 6117-6125.	1.0	80
111	Y-family DNA polymerases respond to DNA damage-independent inhibition of replication fork progression. EMBO Journal, 2006, 25, 868-879.	3.5	78
112	Ttsl regulates symbiotic genes in <i>Rhizobium</i> species NGR234 by binding to <i>tts</i> boxes. Molecular Microbiology, 2008, 68, 736-748.	1.2	77
113	BacA, an ABC Transporter Involved in Maintenance of Chronic Murine Infections with <i>Mycobacterium tuberculosis</i> . Journal of Bacteriology, 2009, 191, 477-485.	1.0	76
114	Polymerase exchange on single DNA molecules reveals processivity clamp control of translesion synthesis. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 7647-7652.	3.3	76
115	The exoR gene of Rhizobium meliloti affects RNA levels of other exo genes but lacks homology to known transcriptional regulators. Journal of Bacteriology, 1991, 173, 3789-3794.	1.0	75
116	Importance of unusually modified lipid A in Sinorhizobium stress resistance and legume symbiosis. Molecular Microbiology, 2005, 56, 68-80.	1.2	74
117	Dimerization of the UmuD' protein in solution and its implications for regulation of SOS mutagenesis. Nature Structural Biology, 1997, 4, 979-982.	9.7	73
118	Identification and characterization of the mutL and mutS gene products of Salmonella typhimurium LT2. Journal of Bacteriology, 1985, 163, 1007-1015.	1.0	73
119	Striking Complexity of Lipopolysaccharide Defects in a Collection of Sinorhizobium meliloti Mutants. Journal of Bacteriology, 2003, 185, 3853-3862.	1.0	72
120	Regulation of <i>Escherichia coli</i> SOS mutagenesis by dimeric intrinsically disordered <i>umuD</i> gene products. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 1152-1157.	3.3	71
121	Essential Role for the BacA Protein in the Uptake of a Truncated Eukaryotic Peptide in <i>Sinorhizobium meliloti</i> . Journal of Bacteriology, 2009, 191, 1519-1527.	1.0	71
122	Multifaceted Recognition of Vertebrate Rev1 by Translesion Polymerases ζ and κ. Journal of Biological Chemistry, 2012, 287, 26400-26408.	1.6	69
123	NMR Structure and Dynamics of the C-Terminal Domain from Human Rev1 and Its Complex with Rev1 Interacting Region of DNA Polymerase î. Biochemistry, 2012, 51, 5506-5520.	1.2	69
124	Altering the conserved nucleotide binding motif in the Salmonella typhimurium MutS mismatch repair protein affects both its ATPase and mismatch binding activities. EMBO Journal, 1991, 10, 2707-15.	3.5	69
125	Mutations altering heat shock specific subunit of RNA polymerase suppress major cellular defects of E. coli mutants lacking the DnaK chaperone. EMBO Journal, 1990, 9, 4027-36.	3.5	69
126	DnaK mutants defective in ATPase activity are defective in negative regulation of the heat shock response: expression of mutant DnaK proteins results in filamentation. Journal of Bacteriology, 1994, 176, 764-780.	1.0	68

#	Article	IF	CITATIONS
127	Unconventional Ubiquitin Recognition by the Ubiquitin-Binding Motif within the Y Family DNA Polymerases Î <sup>1</sup> and Rev1. Molecular Cell, 2010, 37, 408-417.	4.5	68
128	The <scp>DivJ</scp> , <scp>CbrA</scp> and <scp>PleC</scp> system controls <scp>DivK</scp> phosphorylation and symbiosis in <i><scp>S</scp>inorhizobium meliloti</i> . Molecular Microbiology, 2013, 90, 54-71.	1.2	68
129	Regulation of damage-inducible genes in Escherichia coli. Journal of Molecular Biology, 1982, 160, 445-457.	2.0	67
130	A highly conserved protein of unknown function in Sinorhizobium meliloti affects sRNA regulation similar to Hfq. Nucleic Acids Research, 2011, 39, 4691-4708.	6.5	67
131	Exo-Oligosaccharides of Rhizobium sp. Strain NGR234 Are Required for Symbiosis with Various Legumes. Journal of Bacteriology, 2006, 188, 6168-6178.	1.0	65
132	Comparison of Responses to Double-Strand Breaks between <i>Escherichia coli</i> and <i>Bacillus subtilis</i> Reveals Different Requirements for SOS Induction. Journal of Bacteriology, 2009, 191, 1152-1161.	1.0	65
133	The Transcription Elongation Factor NusA Is Required for Stress-Induced Mutagenesis in Escherichia coli. Current Biology, 2010, 20, 80-85.	1.8	65
134	Inhibition of mutagenic translesion synthesis: A possible strategy for improving chemotherapy?. PLoS Genetics, 2017, 13, e1006842.	1.5	65
135	Transcriptional Modulator NusA Interacts with Translesion DNA Polymerases in <i>Escherichia coli</i> . Journal of Bacteriology, 2009, 191, 665-672.	1.0	64
136	Genetic analysis of the Rhizobium meliloti bacA gene: functional interchangeability with the Escherichia coli sbmA gene and phenotypes of mutants. Journal of Bacteriology, 1997, 179, 209-216.	1.0	64
137	Restriction endonuclease cleavage map of pKM101: Relationship to parental plasmid R46. Molecular Genetics and Genomics, 1981, 182, 268-272.	2.4	63
138	Coexpression of UmuD' with UmuC suppresses the UV mutagenesis deficiency of groE mutants. Journal of Bacteriology, 1992, 174, 3133-3139.	1.0	61
139	Disruption of sitA Compromises Sinorhizobium meliloti for Manganese Uptake Required for Protection against Oxidative Stress. Journal of Bacteriology, 2007, 189, 2101-2109.	1.0	61
140	NMR studies of succinoglycan repeating-unit octasaccharides from Rhizobium meliloti and Agrobacterium radiobacter. International Journal of Biological Macromolecules, 1995, 17, 357-363.	3.6	59
141	ATPase-Defective Derivatives of Escherichia coli DnaK That Behave Differently with Respect to ATP-Induced Conformational Change and Peptide Release. Journal of Bacteriology, 2001, 183, 5482-5490.	1.0	59
142	DNA Polymerase V Allows Bypass of Toxic Guanine Oxidation Products in Vivo. Journal of Biological Chemistry, 2007, 282, 12741-12748.	1.6	59
143	The acetyl substituent of succinoglycan is not necessary for alfalfa nodule invasion by Rhizobium meliloti Rm1021. Journal of Bacteriology, 1993, 175, 3653-3655.	1.0	58
144	Inducible reactivation and mutagenesis of UV-irradiated bacteriophage P22 in Salmonella typhimurium LT2 containing the plasmid pKM101. Journal of Bacteriology, 1978, 135, 415-421.	1.0	58

#	Article	IF	CITATIONS
145	Replication is required for the RecA localization response to DNA damage in Bacillus subtilis. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 1360-1365.	3.3	55
146	<i>Sinorhizobium meliloti</i> Requires a Cobalamin-Dependent Ribonucleotide Reductase for Symbiosis With Its Plant Host. Molecular Plant-Microbe Interactions, 2010, 23, 1643-1654.	1.4	54
147	umuDC -Mediated Cold Sensitivity Is a Manifestation of Functions of the UmuD 2 C Complex Involved in a DNA Damage Checkpoint Control. Journal of Bacteriology, 2001, 183, 1215-1224.	1.0	53
148	The Ada protein acts as both a positive and a negative modulator of Escherichia coli's response to methylating agents Proceedings of the National Academy of Sciences of the United States of America, 1994, 91, 9730-9734.	3.3	52
149	Localization of UvrA and Effect of DNA Damage on the Chromosome of Bacillus subtilis. Journal of Bacteriology, 2002, 184, 488-493.	1.0	52
150	A Hierarchical Biology Concept Framework: A Tool for Course Design. CBE: Life Sciences Education, 2004, 3, 111-121.	0.7	52
151	Phasmid vectors for identification of genes by complementation of Escherichia coli mutants. Journal of Bacteriology, 1985, 162, 777-783.	1.0	52
152	Novel Role for the C Terminus of Saccharomyces cerevisiae Rev1 in Mediating Protein-Protein Interactions. Molecular and Cellular Biology, 2006, 26, 8173-8182.	1.1	51
153	The Highly Conserved Bacterial RNase YbeY Is Essential in Vibrio cholerae, Playing a Critical Role in Virulence, Stress Regulation, and RNA Processing. PLoS Pathogens, 2014, 10, e1004175.	2.1	51
154	Identification of YbeY-Protein Interactions Involved in 16S rRNA Maturation and Stress Regulation in Escherichia coli. MBio, 2016, 7, .	1.8	51
155	Genome-Wide Sensitivity Analysis of the Microsymbiont <i>Sinorhizobium meliloti</i> to Symbiotically Important, Defensin-Like Host Peptides. MBio, 2017, 8, .	1.8	51
156	Interaction between the Rev1 C-Terminal Domain and the PolD3 Subunit of Polζ Suggests a Mechanism of Polymerase Exchange upon Rev1/Polζ-Dependent Translesion Synthesis. Biochemistry, 2016, 55, 2043-2053.	1.2	50
157	Robustness encoded across essential and accessory replicons of the ecologically versatile bacterium Sinorhizobium meliloti. PLoS Genetics, 2018, 14, e1007357.	1.5	49
158	Genetic Analyses of DNA Repair: Inference and Extrapolation. Annual Review of Genetics, 1985, 19, 103-126.	3.2	48
159	Resistance to alkylation damage in Escherichia coli: Role of the Ada protein in induction of the adaptive response. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 1990, 233, 53-72.	0.4	48
160	The Rhizobium meliloti ExoK and ExsH glycanases specifically depolymerize nascent succinoglycan chains. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 4912-4917.	3.3	48
161	CbrA Is a Stationary-Phase Regulator of Cell Surface Physiology and Legume Symbiosis in Sinorhizobium meliloti. Journal of Bacteriology, 2006, 188, 4508-4521.	1.0	48
162	Clp and Lon Proteases Occupy Distinct Subcellular Positions in <i>Bacillus subtilis</i> . Journal of Bacteriology, 2008, 190, 6758-6768.	1.0	48

#	Article	IF	CITATIONS
163	Proteomic Alterations Explain Phenotypic Changes in <i>Sinorhizobium meliloti</i> Lacking the RNA Chaperone Hfq. Journal of Bacteriology, 2010, 192, 1719-1729.	1.0	48
164	Central role for RNase YbeY in Hfq-dependent and Hfq-independent small-RNA regulation in bacteria. BMC Genomics, 2014, 15, 121.	1.2	48
165	Biological Cost of Pyocin Production during the SOS Response in Pseudomonas aeruginosa. Journal of Bacteriology, 2014, 196, 3351-3359.	1.0	48
166	The exoD gene of Rhizobium meliloti encodes a novel function needed for alfalfa nodule invasion. Journal of Bacteriology, 1991, 173, 664-677.	1.0	47
167	Identification of specific amino acid residues in the E. coli $\hat{I}^2$ processivity clamp involved in interactions with DNA polymerase III, UmuD and UmuDâ $\in$ <sup>2</sup> . DNA Repair, 2004, 3, 301-312.	1.3	47
168	Genetic Analysis of the Mobilization and Leading Regions of the IncN plasmids pKM101 and pCU1. Journal of Bacteriology, 1999, 181, 2572-2583.	1.0	47
169	Genetic Analysis of the Sinorhizobium meliloti BacA Protein: Differential Effects of Mutations on Phenotypes. Journal of Bacteriology, 2001, 183, 6444-6453.	1.0	46
170	Characterization of Escherichia coli Translesion Synthesis Polymerases and Their Accessory Factors. Methods in Enzymology, 2006, 408, 318-340.	0.4	46
171	Identification of Novel Sinorhizobium meliloti Mutants Compromised for Oxidative Stress Protection and Symbiosis. Journal of Bacteriology, 2007, 189, 2110-2113.	1.0	46
172	Mutagenesis, by methylating and ethylating agents, in mutH, mutL, mutS, and uvrD mutants of Salmonella typhimurium LT2. Journal of Bacteriology, 1983, 153, 33-44.	1.0	46
173	SOS mutagenesis. Current Opinion in Genetics and Development, 1993, 3, 719-725.	1.5	45
174	The <i>phbC</i> (poly-β-hydroxybutyrate synthase) gene of <i>Rhizobium</i> ( <i>Sinorhizobium</i> ) <i>meliloti</i> and characterization of <i>phbC</i> mutants. Canadian Journal of Microbiology, 1998, 44, 554-564.	0.8	45
175	Converting a DNA damage checkpoint effector (UmuD2C) into a lesion bypass polymerase (UmuD'2C). EMBO Journal, 2001, 20, 4287-4298.	3.5	45
176	Interrelations between Glycine Betaine Catabolism and Methionine Biosynthesis in Sinorhizobium meliloti Strain 102F34. Journal of Bacteriology, 2006, 188, 7195-7204.	1.0	45
177	<i>Sinorhizobium meliloti</i> CpdR1 is critical for coâ€ordinating cell cycle progression and the symbiotic chronic infection. Molecular Microbiology, 2009, 73, 586-600.	1.2	45
178	The DNA Polymerase Activity of <i>Saccharomyces cerevisiae</i> Rev1 is Biologically Significant. Genetics, 2011, 187, 21-35.	1.2	45
179	The genetic requirements for UmuDC-mediated cold sensitivity are distinct from those for SOS mutagenesis. Journal of Bacteriology, 1996, 178, 4400-4411.	1.0	44
180	A Novel Screening Method for Isolating Exopolysaccharide-Deficient Mutants. Applied and Environmental Microbiology, 1998, 64, 4600-4602.	1.4	44

#	Article	IF	CITATIONS
181	The Symbiosis Regulator CbrA Modulates a Complex Regulatory Network Affecting the Flagellar Apparatus and Cell Envelope Proteins. Journal of Bacteriology, 2007, 189, 3591-3602.	1.0	44
182	A DinB variant reveals diverse physiological consequences of incomplete TLS extension by a Y-family DNA polymerase. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 21137-21142.	3.3	44
183	Identification of Small Molecule Translesion Synthesis Inhibitors That Target the Rev1-CT/RIR Proteinâ^'Protein Interaction. ACS Chemical Biology, 2017, 12, 1903-1912.	1.6	44
184	Rev7 dimerization is important for assembly and function of the Rev1/Polζ translesion synthesis complex. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E8191-E8200.	3.3	44
185	Posttranslational modification of the umuD-encoded subunit of Escherichia coli DNA polymerase V regulates its interactions with the  processivity clamp. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 5307-5312.	3.3	43
186	The Succinyl and Acetyl Modifications of Succinoglycan Influence Susceptibility of Succinoglycan to Cleavage by the <i>Rhizobium meliloti</i> Glycanases ExoK and ExsH. Journal of Bacteriology, 1998, 180, 4184-4191.	1.0	43
187	Novel conserved motifs in Rev1 C-terminus are required for mutagenic DNA damage tolerance. DNA Repair, 2008, 7, 1455-1470.	1.3	42
188	A Novel <i>Sinorhizobium meliloti</i> Operon Encodes an α-Glucosidase and a Periplasmic-Binding-Protein-Dependent Transport System for α-Glucosides. Journal of Bacteriology, 1999, 181, 4176-4184.	1.0	42
189	Analysis of mRNA synthesis following induction of the Escherichia coli SOS system. Journal of Molecular Biology, 1984, 178, 237-248.	2.0	41
190	A monocysteine approach for probing the structure and interactions of the UmuD protein. Journal of Bacteriology, 1994, 176, 4825-4837.	1.0	41
191	Spontaneous mutators of salmonella typhimurium LT2 generated by insertion of transposable elements. Journal of Bacteriology, 1981, 147, 827-835.	1.0	41
192	Analysis of the region between amino acids 30 and 42 of intact UmuD by a monocysteine approach. Journal of Bacteriology, 1996, 178, 7295-7303.	1.0	40
193	Comparative analysis of in vivo interactions between Rev1 protein and other Y-family DNA polymerases in animals and yeasts. DNA Repair, 2008, 7, 439-451.	1.3	40
194	A Role for the umuDC Gene Products ofEscherichia coli in Increasing Resistance to DNA Damage in Stationary Phase by Inhibiting the Transition to Exponential Growth. Journal of Bacteriology, 2000, 182, 1127-1135.	1.0	39
195	Genetic Interactions between the Escherichia coli umuDC Gene Products and the β Processivity Clamp of the Replicative DNA Polymerase. Journal of Bacteriology, 2001, 183, 2897-2909.	1.0	39
196	Characterization of an endonuclease associated with the drug resistance plasmid pKM101. Journal of Bacteriology, 1977, 131, 583-588.	1.0	39
197	Identification of pKM101-encoded loci specifying potentially lethal gene products. Journal of Bacteriology, 1985, 161, 417-424.	1.0	38
198	Effect of o-acyl substituents on the functional behaviour of Rhizobium meliloti succinoglycan. International Journal of Biological Macromolecules, 1997, 20, 1-7.	3.6	36

#	Article	IF	CITATIONS
199	Two processivity clamp interactions differentially alter the dual activities of UmuC. Molecular Microbiology, 2006, 59, 460-474.	1.2	36
200	Important Late-Stage Symbiotic Role of the Sinorhizobium meliloti Exopolysaccharide Succinoglycan. Journal of Bacteriology, 2018, 200, .	1.0	36
201	PMR of the self-complementary oligoribonucleotide CpCpGpG. Biochemical and Biophysical Research Communications, 1974, 61, 1089-1094.	1.0	35
202	Disulfide cross-linking influences symbiotic activities of nodule peptide NCR247. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 10157-10162.	3.3	35
203	A Highly Conserved Protein of Unknown Function Is Required by Sinorhizobium meliloti for Symbiosis and Environmental Stress Protection. Journal of Bacteriology, 2008, 190, 1118-1123.	1.0	34
204	Lethality of MalE-LacZ hybrid protein shares mechanistic attributes with oxidative component of antibiotic lethality. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 9164-9169.	3.3	34
205	New phenotypes associated with mucAB: alteration of a MucA sequence homologous to the LexA cleavage site. Journal of Bacteriology, 1987, 169, 1818-1823.	1.0	32
206	The Sinorhizobium meliloti RNA Chaperone Hfq Mediates Symbiosis of S. meliloti and Alfalfa. Journal of Bacteriology, 2010, 192, 1710-1718.	1.0	32
207	Mutations Affecting the Ability of the <i>Escherichia coli</i> UmuD′ Protein To Participate in SOS Mutagenesis. Journal of Bacteriology, 1999, 181, 177-185.	1.0	31
208	Role of BacA in Lipopolysaccharide Synthesis, Peptide Transport, and Nodulation by Rhizobium sp. Strain NGR234. Journal of Bacteriology, 2011, 193, 2218-2228.	1.0	31
209	Rhizobium meliloti mutants unable to synthesize anthranilate display a novel symbiotic phenotype. Journal of Bacteriology, 1992, 174, 4416-4426.	1.0	30
210	Skiing the black diamond slope: Progress on the biochemistry of translesion DNA synthesis. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 10348-10350.	3.3	29
211	A model for the structure of the Escherichia coli SOS-regulated UmuD2 protein. DNA Repair, 2002, 1, 77-93.	1.3	29
212	Seeking a niche: putative contributions of the hfq and bacA gene products to the successful adaptation of the brucellae to their intracellular home. Veterinary Microbiology, 2002, 90, 349-363.	0.8	29
213	The Salmonella typhimurium LT2 uvrD gene is regulated by the lexA gene product. Journal of Bacteriology, 1983, 154, 1502-1504.	1.0	29
214	Entry exclusion determinant(s) of IncN plasmid pKM101. Journal of Bacteriology, 1985, 161, 411-416.	1.0	29
215	Interactions of Escherichia coli UmuD with activated RecA analyzed by cross-linking UmuD monocysteine derivatives. Journal of Bacteriology, 1996, 178, 7285-7294.	1.0	28
216	Anaerobiosis induces expression of ant, a new Escherichia coli locus with a role in anaerobic electron transport. Journal of Bacteriology, 1984, 158, 180-186.	1.0	28

#	Article	IF	CITATIONS
217	umuDC-dnaQ Interaction and Its Implications for Cell Cycle Regulation and SOS Mutagenesis in Escherichia coli. Journal of Bacteriology, 2001, 183, 1085-1089.	1.0	27
218	Incomplete base excision repair contributes to cell death from antibiotics and other stresses. DNA Repair, 2018, 71, 108-117.	1.3	27
219	REV1 inhibitor JH-RE-06 enhances tumor cell response to chemotherapy by triggering senescence hallmarks. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 28918-28921.	3.3	27
220	New mutations in cloned Escherichia coli umuDC genes: Novel phenotypes of strains carrying a umuC125 plasmid. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 1991, 250, 183-197.	0.4	26
221	Genetic and Biochemical Characterization of a Novel umuD Mutation: Insights into a Mechanism for UmuD Self-Cleavage. Journal of Bacteriology, 2001, 183, 347-357.	1.0	26
222	Proficient and Accurate Bypass of Persistent DNA Lesions by DinB DNA Polymerases. Cell Cycle, 2007, 6, 817-822.	1.3	26
223	Host-dependent transposon Tn5-mediated streptomycin resistance. Journal of Bacteriology, 1984, 159, 395-399.	1.0	26
224	Plasmid (pKM101)-mediated Weigle reactivation in Escherichia coli K12 and Salmonella typhimurium LT2Genetic dependence, kinetics of induction, and effect of chloramphenicol. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 1980, 71, 25-41.	0.4	25
225	Inferences Concerning the ATPase Properties of DnaK and Other HSP70s Are Affected by the ADP Kinase Activity of Copurifying Nucleoside-diphosphate Kinase. Journal of Biological Chemistry, 1999, 274, 36670-36678.	1.6	25
226	Defect in expression of heat-shock proteins at high temperature in xthA mutants. Journal of Bacteriology, 1986, 165, 763-770.	1.0	24
227	A Non-cleavable UmuD Variant That Acts as a UmuD′ Mimic. Journal of Biological Chemistry, 2006, 281, 9633-9640.	1.6	24
228	Brucella abortus bacA mutant induces greater pro-inflammatory cytokines than the wild-type parent strain. Microbes and Infection, 2007, 9, 55-62.	1.0	24
229	Elevated Levels of Era GTPase Improve Growth, 16S rRNA Processing, and 70S Ribosome Assembly of Escherichia coli Lacking Highly Conserved Multifunctional YbeY Endoribonuclease. Journal of Bacteriology, 2018, 200, .	1.0	24
230	Identification of the uvrD gene product of Salmonella typhimurium LT2. Journal of Bacteriology, 1983, 153, 1172-1179.	1.0	24
231	The Type IV Secretion System of Sinorhizobium meliloti Strain 1021 Is Required for Conjugation but Not for Intracellular Symbiosis. Journal of Bacteriology, 2007, 189, 2133-2138.	1.0	23
232	Multiple Ku orthologues mediate DNA nonâ€homologous endâ€joining in the freeâ€living form and during chronic infection of <i>Sinorhizobium meliloti</i> . Molecular Microbiology, 2008, 67, 350-363.	1.2	23
233	Cenetic localization and characterization of a pKM101-coded endonuclease. Journal of Bacteriology, 1983, 154, 1117-1125.	1.0	23
234	Alteration of the carboxyl-terminal domain of Ada protein influences its inducibility, specificity, and strength as a transcriptional activator. Journal of Bacteriology, 1988, 170, 5263-5271.	1.0	22

#	Article	IF	CITATIONS
235	New discoveries linking transcription to DNA repair and damage tolerance pathways. Transcription, 2011, 2, 37-40.	1.7	22
236	Citrate Synthase Mutants of Sinorhizobium meliloti Are Ineffective and Have Altered Cell Surface Polysaccharides. Journal of Bacteriology, 1999, 181, 7608-7613.	1.0	22
237	LexA-independent expression of a mutant mucAB operon. Journal of Bacteriology, 1990, 172, 6223-6231.	1.0	21
238	Genetic analyses of Rhizobium meliloti exopolysaccharides. International Journal of Biological Macromolecules, 1990, 12, 67-70.	3.6	21
239	Mutational analysis of the RecA protein L1 region identifies this area as a probable part of the coâ€protease substrate binding site. Molecular Microbiology, 1997, 25, 967-978.	1.2	21
240	Enteric YaiW Is a Surface-Exposed Outer Membrane Lipoprotein That Affects Sensitivity to an Antimicrobial Peptide. Journal of Bacteriology, 2014, 196, 436-444.	1.0	21
241	All nod genes of Rhizobium meliloti are involved in alfalfa nodulation by exo mutants. Journal of Bacteriology, 1988, 170, 1003-1006.	1.0	20
242	A region of the Ada DNA-repair protein required for the activation of ada transcription is not necessary for activation of alkA Proceedings of the National Academy of Sciences of the United States of America, 1991, 88, 9001-9005.	3.3	20
243	Genetic analysis of Rhizobium meliloti bacA-phoA fusion results in identification of degP: two loci required for symbiosis are closely linked to degP. Journal of Bacteriology, 1996, 178, 745-752.	1.0	20
244	Differential cleavage of LexA and UmuD mediated by recA pro67 mutants: implications for common LexA and UmuD binding sites on RecA 1 1Edited by M. Gottesman. Journal of Molecular Biology, 1998, 276, 405-415.	2.0	20
245	BacA-Mediated Bleomycin Sensitivity in Sinorhizobium meliloti Is Independent of the Unusual Lipid A Modification. Journal of Bacteriology, 2006, 188, 3143-3148.	1.0	20
246	Pseudo-B <sub>12</sub> Joins the Cofactor Family. Journal of Bacteriology, 2008, 190, 1157-1159.	1.0	20
247	Proteasomal regulation of the mutagenic translesion DNA polymerase, Saccharomyces cerevisiae Rev1. DNA Repair, 2011, 10, 169-175.	1.3	20
248	Rev7 loss alters cisplatin response and increases drug efficacy in chemotherapy-resistant lung cancer. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 28922-28924.	3.3	20
249	Increased energy demand from anabolic-catabolic processes drives Î <sup>2</sup> -lactam antibiotic lethality. Cell Chemical Biology, 2022, 29, 276-286.e4.	2.5	20
250	Mutagenesis and other responses induced by DNA damage in Escherichia coli. Biochimie, 1982, 64, 607-610.	1.3	19
251	A directional, high-frequency chromosomal mobilization system for genetic mapping of Rhizobium meliloti. Journal of Bacteriology, 1992, 174, 324-326.	1.0	19
252	A Small-Scale Concept-based Laboratory Component: The Best of Both Worlds. CBE Life Sciences Education, 2006, 5, 41-51.	1.1	19

#	Article	IF	CITATIONS
253	Comparison of cytokinin activities of the base, ribonucleoside and 5′- and cyclic-3′,5′-monophosphate ribonucleotides of N6-isopentenyl-, N6-benzyl or 8-bromo-adenine. Phytochemistry, 1975, 14, 1479-1484.	1.4	18
254	Stepwise enzymic oligoribonucleotide synthesis including modified nucleotides. Biochemistry, 1975, 14, 817-824.	1.2	18
255	Glucose 6-phosphate dehydrogenase is required for sucrose and trehalose to be efficient osmoprotectants inSinorhizobium meliloti. FEMS Microbiology Letters, 2003, 229, 183-188.	0.7	18
256	Responses of the model legumeMedicago truncatulato the rhizobial exopolysaccharide succinoglycan. Plant Signaling and Behavior, 2008, 3, 888-890.	1.2	18
257	Steric Gate Variants of UmuC Confer UV Hypersensitivity on <i>Escherichia coli</i> . Journal of Bacteriology, 2009, 191, 4815-4823.	1.0	18
258	Different Phenotypic Classes of <i>Sinorhizobium meliloti</i> Mutants Defective in Synthesis of K Antigen. Journal of Bacteriology, 1998, 180, 5432-5436.	1.0	18
259	<i>Rhizobium meliloti</i> exopolysaccharides: genetic analyses and symbiotic importance. Biochemical Society Transactions, 1991, 19, 636-644.	1.6	17
260	Acidic conditions permit effective nodulation of alfalfa by invasion-deficient Rhizobium meliloti exoD mutants Genes and Development, 1991, 5, 2274-2287.	2.7	17
261	UmuD2 Inhibits a Non-covalent Step during DinB-mediated Template Slippage on Homopolymeric Nucleotide Runs. Journal of Biological Chemistry, 2010, 285, 23086-23095.	1.6	17
262	Endoribonuclease YbeY Is Linked to Proper Cellular Morphology and Virulence in Brucella abortus. Journal of Bacteriology, 2018, 200, .	1.0	17
263	Characterization of Novel Alleles of the <i>Escherichia coli umuDC</i> Genes Identifies Additional Interaction Sites of UmuC with the Beta Clamp. Journal of Bacteriology, 2009, 191, 5910-5920.	1.0	16
264	Complementation of a pKM101 derivative that decreases resistance to UV killing but increases susceptibility to mutagenesis. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 1985, 150, 147-158.	0.4	15
265	C21orf57 is a human homologue of bacterial YbeY proteins. Biochemical and Biophysical Research Communications, 2017, 484, 612-617.	1.0	15
266	Sinorhizobium meliloti YbeY is a zinc-dependent single-strand specific endoribonuclease that plays an important role in 16S ribosomal RNA processing. Nucleic Acids Research, 2020, 48, 332-348.	6.5	14
267	Genetic Mapping of Symbiotic Loci on theRhizobium melilotiChromosome. Molecular Plant-Microbe Interactions, 1992, 5, 223.	1.4	14
268	Mutagenesis- and Repair-enhancing Activities Associated with the Plasmid pKM101. Cold Spring Harbor Symposia on Quantitative Biology, 1979, 43, 893-896.	2.0	14
269	Inhibition of RecA-mediated cleavage in covalent dimers of UmuD. Journal of Bacteriology, 1996, 178, 7304-7307.	1.0	13
270	A Chemical Genetics Analysis of the Roles of Bypass Polymerase DinB and DNA Repair Protein AlkB in Processing N2-Alkylguanine Lesions In Vivo. PLoS ONE, 2014, 9, e94716.	1.1	13

#	Article	IF	CITATIONS
271	Regulation and Functions of Escherichia coli Genes Induced by DNA Damage. , 1982, 20, 43-63.		13
272	The effects of the ultraviolet-protecting plasmids pKM101 and R205 on DNA polymerase I activity in Escherichia coli K-12. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 1979, 60, 135-142.	0.4	12
273	Understanding the Complexity of an Organism's Responses to DNA Damage. Cold Spring Harbor Symposia on Quantitative Biology, 2000, 65, 1-10.	2.0	12
274	Interactions of Peptides with DnaK and C-Terminal DnaK Fragments Studied Using Fluorescent and Radioactive Peptides. Archives of Biochemistry and Biophysics, 1998, 356, 177-186.	1.4	11
275	Active site residues critical for flavin binding and 5,6â€dimethylbenzimidazole biosynthesis in the flavin destructase enzyme BluB. Protein Science, 2012, 21, 839-849.	3.1	11
276	Virtual Pharmacophore Screening Identifies Smallâ€Molecule Inhibitors of the Rev1 T/RIR Protein–Protein Interaction. ChemMedChem, 2019, 14, 1610-1617.	1.6	11
277	Cellular responses to DNA damage Environmental Health Perspectives, 1985, 62, 115-117.	2.8	10
278	The unusual UBZ domain of Saccharomyces cerevisiae polymerase $\hat{\mathfrak{l}}\cdot$ DNA Repair, 2010, 9, 1130-1141.	1.3	10
279	Alteration of lysine 178 in the hinge region of the Escherichia coli ada protein interferes with activation of ada, but not alkA, transcription. Journal of Bacteriology, 1995, 177, 1268-1274.	1.0	9
280	Identification of the Rhizobium meliloti alcohol dehydrogenase gene (adhA) and heterologous expression in Alcaligenes eutrophus. BBA - Proteins and Proteomics, 1998, 1384, 197-203.	2.1	9
281	To Cleave or Not to Cleave? Insights from the LexA Crystal Structure. Molecular Cell, 2001, 8, 486-487.	4.5	9
282	Identification of Elements of the Peptide Binding Site of DnaK by Peptide Cross-linking. Journal of Biological Chemistry, 1996, 271, 19668-19674.	1.6	8
283	Analyses of the Roles of R.Meliloti Exopolysaccharides in Nodulation. Current Plant Science and Biotechnology in Agriculture, 1991, , 182-188.	0.0	8
284	Lack of Effect on Recombination of Mutagenesis-enhancing Plasmids in Escherichia coli K12 and Salmonella typhimurium LT2. Journal of General Microbiology, 1978, 108, 321-323.	2.3	8
285	Degradation of the Escherichia coli Essential Proteins DapB and Dxr Results in Oxidative Stress, which Contributes to Lethality through Incomplete Base Excision Repair. MBio, 2022, 13, e0375621.	1.8	8
286	A constitutive O6-methylguanine-DNA methyltransferase of Rhizobium meliloti. Mutation Research DNA Repair, 1990, 235, 165-169.	3.8	7
287	Rhizobium meliloti Exopolysaccharides Annals of the New York Academy of Sciences, 1991, 646, 61-68.	1.8	7
288	SnapShot: DNA Polymerases II Mammals. Cell, 2010, 141, 370-370.e1.	13.5	7

#	Article	IF	CITATIONS
289	Amino acid similarities to other proteins offer insights into roles of UmuD and UmuC in mutagenesis. Genome, 1989, 31, 594-596.	0.9	6
290	The groE gene products of Escherchia coli are dispensable for mucA+B+-dependent UV mutagenesis. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 1994, 309, 225-233.	0.4	6
291	SnapShot: DNA Polymerases I Prokaryotes. Cell, 2010, 141, 192-192.e1.	13.5	6
292	Regulation and Function of Cellular Gene Products Involved in UV and Chemical Mutagenesis in E. Coli. , 1983, 23, 181-202.		6
293	The Centennial before the Millennium: the <i>Journal of Bacteriology</i> as a World Voice for Microbiological Research. Journal of Bacteriology, 1999, 181, 1-3.	1.0	6
294	Bryn Bridges and mutagenesis: exploring the intellectual space. Mutation Research DNA Repair, 2001, 485, 69-81.	3.8	5
295	Biotin labeling of the symbiotically important succinoglycan oligosaccharides of Rhizobium meliloti for identification of putative plant receptors. Carbohydrate Research, 2001, 333, 73-78.	1.1	5
296	Signal Transduction in the Escherichia coli SOS Response. , 2010, , 2127-2136.		5
297	Efficient Extension of Slipped DNA Intermediates by DinB Is Required To Escape Primer Template Realignment by DnaQ. Journal of Bacteriology, 2011, 193, 2637-2641.	1.0	5
298	A stapled POL κ peptide targets REV1 to inhibit mutagenic translesion synthesis. Environmental and Molecular Mutagenesis, 2020, 61, 830-836.	0.9	5
299	P-Azidoiodoacetanilide, a New Short Photocrosslinker That Has Greater Cysteine Specificity Than P-Azidophenacyl Bromide and P-Azidobromoacetanilide. Biochemical and Biophysical Research Communications, 1995, 217, 1177-1184.	1.0	4
300	Lighting torches in the DNA repair field: development of key concepts. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2005, 577, 14-23.	0.4	4
301	Genetic Strategies in Strain Design for Fermentations. , 1983, 25, 349-376.		4
302	Exopolysaccharides and Rhizobium Meliloti-Alfalfa Interactions. Current Plant Science and Biotechnology in Agriculture, 1993, , 203-206.	0.0	4
303	Genetic Analyses of Cellular Functions Required for UV Mutagenesis in Escherichia Coli. , 1990, 52, 269-275.		2
304	Competencies: A Cure for Pre-Med Curriculum. Science, 2011, 334, 760-761.	6.0	2
305	Non mutagenic and mutagenic DNA damage tolerance. Cell Cycle, 2016, 15, 314-315.	1.3	2
306	Mutagenic DNA Repair in Bacteria: The Role of UmuDC and MucAB. , 1986, 38, 273-280.		2

18

#	Article	IF	CITATIONS
307	The SOS Responses of Prokaryotes to DNA Damage. , 2014, , 463-508.		1
308	Base Excision Repair., 0, , 169-226.		1
309	Mutagenesis-Enhancement by Plasmids in Mutagenesis Tester Strains. , 1985, 34, 111-120.		1
310	Genetic Analyses of the Roles of UmuDC and MucAB in Mutagenesis. , 1986, 39, 251-257.		1
311	Genetic Analyses and Manipulations of Rhizobium meliloti Exopolysaccharides. , 1990, , 285-294.		1
312	Antimutagenic Effect of umuD Mutant Plasmids: Isolation and Characterization of umuD Mutants Reduced in their Ability to Promote UV Mutagenesis in Escherichia Coli. , 1990, 52, 417-421.		1
313	General principles of DNA repair in microorganisms and implications for future research. Birth Defects: Original Article Series, 1989, 25, 45-59.	0.1	1
314	A Mutant Era GTPase Suppresses Phenotypes Caused by Loss of Highly Conserved YbeY Protein in Escherichia coli. Frontiers in Microbiology, 2022, 13, .	1.5	1
315	Signal Transduction in the Escherichia coli SOS Response. , 2003, , 185-189.		0
316	Heterogeneity of Nucleotide Excision Repair in Eukaryotic Genomes. , 0, , 351-377.		0
317	Repair of Mitochondrial DNA Damage. , 2014, , 449-459.		0
318	Recombinational Repair, Replication Fork Repair, and DNA Damage Tolerance. , 0, , 569-612.		0
319	DNA Damage Tolerance and Mutagenesis in Eukaryotic Cells. , 0, , 613-661.		0
320	Managing DNA Strand Breaks in Eukaryotic Cells. , 2014, , 663-710.		0
321	Cell Cycle Checkpoints. , 2014, , 753-777.		0
322	Cell Cycle Checkpoints. , 2014, , 779-815.		0
323	Transcriptional Responses to DNA Damage. , 2014, , 817-844.		Ο
324	DNA Damage and the Regulation of Cell Fate. , 2014, , 845-862.		0

#	Article	IF	CITATIONS
325	Other Diseases Associated with Defects in Nucleotide Excision Repair of DNA. , 0, , 895-918.		0
326	Diseases Associated with Defective Responses to DNA Strand Breaks. , 2014, , 919-946.		0
327	Diseases Associated with Disordered DNA Helicase Function. , 0, , 947-978.		0
328	Additional Diseases Associated with Defective Responses to DNA Damage. , 2014, , 979-999.		0
329	Hereditary Diseases That Implicate Defective Responses to DNA Damage. , 2014, , 1001-1047.		0
330	DNA Polymorphisms in Gatekeeper and Guardian Genes. , 2014, , 1049-1080.		0
331	Nucleotide Excision Repair in Eukaryotes. , 2014, , 267-315.		0
332	DNA Damage. , 2014, , 9-69.		0
333	Mutagenesis and Translesion Synthesis in Prokaryotes. , 0, , 509-568.		0
334	Mismatch Repair. , 0, , 389-447.		0
335	A special issue dedicated to Dr. Bruce N. Ames: Introduction. Mutation Research - Genetic Toxicology and Environmental Mutagenesis, 2020, 849, 503115.	0.9	0
336	Invasion of Alfalfa Root Nodules by the Nitrogen-Fixing Bacterium Rhizobium meliloti. Current Plant Science and Biotechnology in Agriculture, 2000, , 235-236.	0.0	0
337	LexA Regulatory System. , 2004, , 546-550.		Ο
338	A Nonâ€eleavable UmuD variant that acts as a UmuD' mimic. FASEB Journal, 2006, 20, LB55.	0.2	0
339	Control and Function of Translesion DNA Polymerases. FASEB Journal, 2010, 24, 67.2.	0.2	Ο
340	Reversal of Alkylation Damage in DNA. , 0, , 139-168.		0
341	Correcting Altered Bases in DNA: DNA Repair. , 0, , 107-107.		0
342	Genetic Analyses Suggesting Bacterial-Plant Signalling During Nodulation. NATO ASI Series Series H, Cell Biology, 1989, , 329-336.	0.5	0

#	Article	IF	CITATIONS
343	What is the Molecular Mechanism of UV Mutagenesis in Escherichia coli?. , 1991, , 177-182.		Ο
344	Reversal of Base Damage Caused by UV Radiation. , 0, , 109-138.		0
345	Mechanism of Nucleotide Excision Repair in Eukaryotes. , 0, , 317-350.		0
346	Introduction to Mutagenesis. , 0, , 71-106.		0
347	Nucleotide Excision Repair. , 0, , 227-266.		0
348	Sources and Consequences of DNA Damage. , 0, , 1-1.		0
349	Disease States Associated with Defective Biological Responses to DNA Damage. , 0, , 863-863.		Ο