# Graham C Walker

List of Publications by Year
in descending order



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|---|---|---|---|
| 349 papers | 32,862 citations | 89 h-index (3731) | 164 g-index (5394) |
| 362 all docs | 362 docs citations | 362 times ranked | 17566 citing authors |

| # | 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. | 2.2 | 1,129 |
| 3 | A genetic basis for Pseudomonas aeruginosa biofilm antibiotic resistance. Nature, 2003, 426, 306-310. | 27.8 | 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. | 9.7 | 798 |
| 6 | How rhizobial symbionts invade plants: the Sinorhizobiumâ€“Medicago model. Nature Reviews Microbiology, 2007, 5, 619-633. | 28.6 | 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. | 7.1 | 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. | 7.1 | 596 |
| 9 | DNA Repair and Mutagenesis. , 2005, , . |  | 591 |
| 10 | Inducible DNA Repair Systems. Annual Review of Biochemistry, 1985, 54, 425-457. | 11.1 | 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. | 7.1 | 527 |
| 12 | Eukaryotic Translesion Polymerases and Their Roles and Regulation in DNA Damage Tolerance. Microbiology and Molecular Biology Reviews, 2009, 73, 134-154. | 6.6 | 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. | 2.2 | 448 |
| 14 | Oxidation of the Guanine Nucleotide Pool Underlies Cell Death by Bactericidal Antibiotics. Science, 2012, 336, 315-319. | 12.6 | 400 |
| 15 | Bactericidal Antibiotics Induce Toxic Metabolic Perturbations that Lead to Cellular Damage. Cell Reports, 2015, 13, 968-980. | 6.4 | 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. | 7.1 | 383 |
| 17 | Symbiotic mutants of rhizobium meliloti that uncouple plant from bacterial differentiation. Cell, 1985, 40, 869-877. | 28.9 | 348 |
| 18 | Molecular Determinants of a Symbiotic Chronic Infection. Annual Review of Genetics, 2008, 42, 413-441. | 7.6 | 326 |

| # | Article | IF | Citations |
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| 19 | Proteins required for ultraviolet light and chemical mutagenesis. Journal of Molecular Biology, 1983, 164, 175-192. | 4.2 | 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. | 7.1 | 302 |
| 21 | Biosynthesis of succinoglycan, a symbiotically important exopolysaccharide of Rhizobium meliloti. Cell, 1993, 74, 269-280. | 28.9 | 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. | 28.9 | 295 |
| 23 | The Sos Response: Recent Insights intoumuDC-Dependent Mutagenesis and DNA Damage Tolerance. Annual Review of Genetics, 2000, 34, 479-497. | 7.6 | 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. | 7.1 | 278 |
| 25 | General transduction in Rhizobium meliloti. Journal of Bacteriology, 1984, 159, 120-124. | 2.2 | 274 |
| 26 | Degradation of carboxy-terminal-tagged cytoplasmic proteins by the Escherichia coli protease HflB (FtsH). Genes and Development, 1998, 12, 1348-1355. | 5.9 | 255 |
| 27 | Rhizobium meliloti mutants that fail to succinylate their Calcofluor-binding exopolysaccharide are defective in nodule invasion. Cell, 1987, 51, 579-587. | 28.9 | 243 |
| 28 | Escherichia coli dnaK null mutants are inviable at high temperature. Journal of Bacteriology, 1987, 169, 283-290. | 2.2 | 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. | 2.2 | 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. | 2.2 | 236 |
| 31 | A single amino acid governs enhanced activity of DinB DNA polymerases on damaged templates. Nature, 2006, 439, 225-228. | 27.8 | 227 |
| 32 | A White-Box Machine Learning Approach for Revealing Antibiotic Mechanisms of Action. Cell, 2019, 177, 1649-1661.e9. | 28.9 | 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. | 7.1 | 222 |
| 34 | Unraveling the Physiological Complexities of Antibiotic Lethality. Annual Review of Pharmacology and Toxicology, 2015, 55, 313-332. | 9.4 | 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. | 7.1 | 216 |
| 36 | Expression of the E. coli uvrA gene is inducible. Nature, 1981, 289, 808-810. | 27.8 | 210 |

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| 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. | 2.2 | 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 <i>Sinorhizobium meliloti</i> Polysaccharides. Journal of Bacteriology, 2000, 182, 4310-4318. | 2.2 | 190 |
| 40 | Changing the Culture of Science Education at Research Universities. Science, 2011, 331, 152-153. | 12.6 | 188 |
| 41 | Identification of plasmid (pKM101)-coded proteins involved in mutagenesis and UV resistance. Nature, 1982, 300, 278-281. | 27.8 | 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. | 7.1 | 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. | 7.1 | 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. | 7.1 | 179 |
| 45 | Detailed structural characterization of succinoglycan, the major exopolysaccharide of Rhizobium meliloti Rm1021. Journal of Bacteriology, 1994, 176, 1997-2002. | 2.2 | 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. | 7.1 | 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. | 2.2 | 169 |
| 48 | Characterization of a Novel Pyranopyridine Inhibitor of the AcrAB Efflux Pump of Escherichia coli. Antimicrobial Agents and Chemotherapy, 2014, 58, 722-733. | 3.2 | 169 |
| 49 | Hydroxyurea Induces Hydroxyl Radical-Mediated Cell Death in Escherichia coli. Molecular Cell, 2009, 36, 845-860. | 9.7 | 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. | 5.9 | 167 |
| 51 | Exopolysaccharides of Rhizobium: synthesis, regulation and symbiotic function. Trends in Genetics, 1994, 10, 63-67. | 6.7 | 165 |
| 52 | Rhizobium meliloti mutants that overproduce the R. meliloti acidic calcofluor-binding exopolysaccharide. Journal of Bacteriology, 1988, 170, 4249-4256. | 2.2 | 164 |
| 53 | A LuxR Homolog Controls Production of Symbiotically Active Extracellular Polysaccharide II by Sinorhizobium meliloti. Journal of Bacteriology, 2002, 184, 5067-5076. | 2.2 | 164 |
| 54 | Similar Requirements of a Plant Symbiont and a Mammalian Pathogen for Prolonged Intracellular Survival. Science, 2000, 287, 2492-2493. | 12.6 | 162 |

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| 55 | BluB cannibalizes flavin to form the lower ligand of vitamin B12. Nature, 2007, 446, 449-453. | 27.8 | 160 |
| 56 | Suppression of Rev3, the catalytic subunit of PolÎ¶, sensitizes drug-resistant lung tumors to chemotherapy. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 20786-20791. | 7.1 | 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. | 7.1 | 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. | 7.1 | 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. | 2.2 | 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. | 7.8 | 140 |
| 62 | Family of glycosyl transferases needed for the synthesis of succinoglycan by Rhizobium meliloti. Journal of Bacteriology, 1993, 175, 7033-7044. | 2.2 | 140 |
| 63 | Mutagenesis and More: umuDC and the Escherichia coli SOS Response. Genetics, 1998, 148, 1599-1610. | 2.9 | 140 |
| 64 | Rhizobium meliloti exopolysaccharides: Synthesis and symbiotic function. Gene, 1996, 179, 141-146. | 2.2 | 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. | 2.2 | 139 |
| 66 | Y-family DNA polymerases in Escherichia coli. Trends in Microbiology, 2007, 15, 70-77. | 7.7 | 137 |
| 67 | The SOS Regulatory Network. EcoSal Plus, 2008, 3, . | 5.4 | 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. | 7.1 | 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. | 7.1 | 129 |
| 70 | Conserved Bacterial RNase YbeY Plays Key Roles in 70S Ribosome Quality Control and 16S rRNA Maturation. Molecular Cell, 2013, 49, 427-438. | 9.7 | 127 |
| 71 | A Small Molecule Targeting Mutagenic Translesion Synthesis Improves Chemotherapy. Cell, 2019, 178, 152-159.e11. | 28.9 | 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. | 2.2 | 124 |

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| 73 | Conjugal transfer system of the IncN plasmid pKM101. Journal of Bacteriology, 1985, 161, 402-410. | 2.2 | 123 |
| 74 | [19] Genetic techniques in Rhizobium meliloti. Methods in Enzymology, 1991, 204, 398-418. | 1.0 | 122 |
| 75 | Structure of the Endonuclease Domain of MutL: Unlicensed to Cut. Molecular Cell, 2010, 39, 145-151. | 9.7 | 122 |
| 76 | Structural Characterization of the Symbiotically Important Low-Molecular-Weight Succinoglycan of <i>Sinorhizobium meliloti</i>. Journal of Bacteriology, 1999, 181, 6788-6796. | 2.2 | 120 |
| 77 | Symbiotic loci of Rhizobium meliloti identified by random TnphoA mutagenesis. Journal of Bacteriology, 1988, 170, 4257-4265. | 2.2 | 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. | 7.1 | 118 |
| 80 | Cold sensitivity induced by overproduction of UmuDC in Escherichia coli. Journal of Bacteriology, 1985, 162, 155-161. | 2.2 | 117 |
| 81 | Functional organization of plasmid pKM101. Journal of Bacteriology, 1981, 145, 1310-1316. | 2.2 | 108 |
| 82 | Cell Cycle Control by the Master Regulator CtrA in Sinorhizobium meliloti. PLoS Genetics, 2015, 11, e1005232. | 3.5 | 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. | 7.1 | 100 |
| 85 | Î² Clamp Directs Localization of Mismatch Repair in Bacillus subtilis. Molecular Cell, 2008, 29, 291-301. | 9.7 | 100 |
| 86 | Biosynthetic control of molecular weight in the polymerization of the octasaccharide subunits of succinoglycan, a symbiotically important exopolysaccharide of <i>Rhizobium meliloti</i>. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 13477-13482. | 7.1 | 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. | 7.1 | 99 |
| 88 | UmuD and RecA Directly Modulate the Mutagenic Potential of the Y Family DNA Polymerase DinB. Molecular Cell, 2007, 28, 1058-1070. | 9.7 | 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. | 7.1 | 99 |
| 90 | Structural Basis of Rev1-mediated Assembly of a Quaternary Vertebrate Translesion Polymerase Complex Consisting of Rev1, Heterodimeric Polymerase (Pol) Î¶, and Pol Îº. Journal of Biological Chemistry, 2012, 287, 33836-33846. | 3.4 | 98 |

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| 91 | SOS-regulated proteins in translesion DNA synthesis and mutagenesis. Trends in Biochemical Sciences, 1995, 20, 416-420. | 7.5 | 97 |
| 92 | Role of <i>Escherichia coli</i> YbeY, a highly conserved protein, in rRNA processing. Molecular Microbiology, 2010, 78, 506-518. | 2.5 | 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. | 2.2 | 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. | 7.1 | 96 |
| 95 | Isolation and characterization of Tn5 insertion mutations in the lexA gene of Escherichia coli. Journal of Bacteriology, 1983, 153, 1368-1378. | 2.2 | 96 |
| 96 | Exogenous suppression of the symbiotic deficiencies of Rhizobium meliloti exo mutants. Journal of Bacteriology, 1992, 174, 3403-3406. | 2.2 | 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. | 2.5 | 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. | 2.2 | 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. | 7.1 | 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. | 2.2 | 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. | 2.2 | 89 |
| 102 | Structural studies of a novel exopolysaccharide produced by a mutant of Rhizobium meliloti strain Rm1021. Carbohydrate Research, 1990, 198, 305-312. | 2.3 | 88 |
| 103 | Visualization of Mismatch Repair in Bacterial Cells. Molecular Cell, 2001, 8, 1197-1206. | 9.7 | 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. | 2.2 | 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. | 2.2 | 85 |
| 106 | Global 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. | 7.1 | 85 |
| 107 | The muc genes of pKM101 are induced by DNA damage. Journal of Bacteriology, 1983, 155, 1306-1315. | 2.2 | 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. | 7.1 | 82 |

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| 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. | 2.2 | 82 |
| 110 | groE mutants of Escherichia coli are defective in umuDC-dependent UV mutagenesis. Journal of Bacteriology, 1989, 171, 6117-6125. | 2.2 | 80 |
| 111 | Y-family DNA polymerases respond to DNA damage-independent inhibition of replication fork progression. EMBO Journal, 2006, 25, 868-879. | 7.8 | 78 |
| 112 | TtsI regulates symbiotic genes in <i>Rhizobium</i> species NGR234 by binding to <i>tts</i> boxes. Molecular Microbiology, 2008, 68, 736-748. | 2.5 | 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. | 2.2 | 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. | 7.1 | 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. | 2.2 | 75 |
| 116 | Importance of unusually modified lipid A in Sinorhizobium stress resistance and legume symbiosis. Molecular Microbiology, 2005, 56, 68-80. | 2.5 | 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. | 2.2 | 73 |
| 119 | Striking Complexity of Lipopolysaccharide Defects in a Collection of Sinorhizobium meliloti Mutants. Journal of Bacteriology, 2003, 185, 3853-3862. | 2.2 | 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. | 7.1 | 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. | 2.2 | 71 |
| 122 | Multifaceted Recognition of Vertebrate Rev1 by Translesion Polymerases Î¶ and Îº. Journal of Biological Chemistry, 2012, 287, 26400-26408. | 3.4 | 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. | 2.5 | 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. | 7.8 | 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. | 7.8 | 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. | 2.2 | 68 |

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| 127 | Unconventional Ubiquitin Recognition by the Ubiquitin-Binding Motif within the Y Family DNA Polymerases Î¹ and Rev1. Molecular Cell, 2010, 37, 408-417. | 9.7 | 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. | 2.5 | 68 |
| 129 | Regulation of damage-inducible genes in Escherichia coli. Journal of Molecular Biology, 1982, 160, 445-457. | 4.2 | 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. | 14.5 | 67 |
| 131 | Exo-Oligosaccharides of Rhizobium sp. Strain NGR234 Are Required for Symbiosis with Various Legumes. Journal of Bacteriology, 2006, 188, 6168-6178. | 2.2 | 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. | 2.2 | 65 |
| 133 | The Transcription Elongation Factor NusA Is Required for Stress-Induced Mutagenesis in Escherichia coli. Current Biology, 2010, 20, 80-85. | 3.9 | 65 |
| 134 | Inhibition of mutagenic translesion synthesis: A possible strategy for improving chemotherapy?. PLoS Genetics, 2017, 13, e1006842. | 3.5 | 65 |
| 135 | Transcriptional Modulator NusA Interacts with Translesion DNA Polymerases in <i>Escherichia coli</i>. Journal of Bacteriology, 2009, 191, 665-672. | 2.2 | 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. | 2.2 | 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. | 2.2 | 61 |
| 139 | Disruption of sitA Compromises Sinorhizobium meliloti for Manganese Uptake Required for Protection against Oxidative Stress. Journal of Bacteriology, 2007, 189, 2101-2109. | 2.2 | 61 |
| 140 | NMR studies of succinoglycan repeating-unit octasaccharides from Rhizobium meliloti and Agrobacterium radiobacter. International Journal of Biological Macromolecules, 1995, 17, 357-363. | 7.5 | 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. | 2.2 | 59 |
| 142 | DNA Polymerase V Allows Bypass of Toxic Guanine Oxidation Products in Vivo. Journal of Biological Chemistry, 2007, 282, 12741-12748. | 3.4 | 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. | 2.2 | 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. | 2.2 | 58 |

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| 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. | 7.1 | 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. | 2.6 | 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. | 2.2 | 53 |
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