Robert G Lloyd

List of Publications by Year
in descending order

91 papers	6,965 citations	41344 49 h-index	64796 79 g-index
91 all docs	91 docs citations	91 times ranked	2386 citing authors

#	Article	IF	Citations
1	Recombinational repair and restart of damaged replication forks. Nature Reviews Molecular Cell Biology, 2002, 3, 859-870.	37.0	369
2	Modulation of RNA Polymerase by (p)ppGpp Reveals a RecG-Dependent Mechanism for Replication Fork Progression. Cell, 2000, 101, 35-45.	28.9	275
3	Formation and resolution of recombination intermediates by E. coliRecA and RuvC proteins. Nature, 1991, 354, 506-510.	27.8	243
4	A novel repeated DNA sequence located in the intergenic regions of bacterial chromosomes. Nucleic Acids Research, 1990, 18, 6503-6508.	14.5	196
5	The DNA replication protein PriA and the recombination protein RecG bind D-loops. Journal of Molecular Biology, 1997, 270, 212-221.	4.2	191
6	Effect of ruv mutations on recombination and DNA repair in Escherichia coli K12. Molecular Genetics and Genomics, 1984, 194, 303-309.	2.4	182
7	Reverse branch migration of holliday junctions by RecG protein: A new mechanism for resolution of intermediates in recombination and DNA repair. Cell, 1993, 75, 341-350.	28.9	176
8	RNA Polymerase Modulators and DNA Repair Activities Resolve Conflicts between DNA Replication and Transcription. Molecular Cell, 2005, 19, 247-258.	9.7	174
9	Repair of DNA double-strand breaks in Escherichia coli K12 requires a functional recN product. Molecular Genetics and Genomics, 1984, 195, 267-274.	2.4	163
10	Rep Provides a Second Motor at the Replisome to Promote Duplication of Protein-Bound DNA. Molecular Cell, 2009, 36, 654-666.	9.7	158
11	Holliday Junction Processing in Bacteria: Insights from the Evolutionary Conservation of RuvABC, RecG, and RusA. Journal of Bacteriology, 1999, 181, 5543-5550.	2.2	155
12	Processing of recombination intermediates by the RecG and RuvAB proteins ofEscherichia coli. Nucleic Acids Research, 1993, 21, 1719-1725.	14.5	144
13	Holliday Junction Resolvases Encoded by HomologousrusAGenes inEscherichia coliK-12 and Phage 82. Journal of Molecular Biology, 1996, 257, 561-573.	4.2	141
14	Crystal structure of E.coli RuvA with bound DNA Holliday junction at 6 Ã… resolution. Nature Structural Biology, 1998, 5, 441-446.	9.7	135
15	Genome stability and the processing of damaged replication forks by RecG. Trends in Genetics, 2002, 18, 413-419.	6.7	134
16	Molecular and functional analysis of the ruv region of Escherichia coli K-12 reveals three genes involved in DNA repair and recombination. Molecular Genetics and Genomics, 1990, 221, 219-226.	2.4	132
17	Direct Rescue of Stalled DNA Replication Forks via the Combined Action of PriA and RecG Helicase Activities. Molecular Cell, 2002, 9, 241-251.	9.7	128
18	Inducible expression of a gene specific to the RecF pathway for recombination in Escherichia coli K12. Molecular Genetics and Genomics, 1983, 190, 162-167.	2.4	125

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19	Avoiding chromosome pathology when replication forks collide. Nature, 2013, 500, 608-611.	27.8	117
20	Hyper-recombination in uvrD mutants of Escherichia coli K-12. Molecular Genetics and Genomics, 1980, 180, 185-191.	2.4	116
21	Damage to DNA induces expression of the ruv gene of Escherichia coli. Molecular Genetics and Genomics, 1982, 185, 352-355.	2.4	114
22	Identification of the recR locus of Escherichia coli K-12 and analysis of its role in recombination and DNA repair. Molecular Genetics and Genomics, 1989, 216, 503-510.	2.4	113
23	Isolation and Characterization of an Escherichia coli K-12 Mutant with a Temperature-Sensitive RecA â^' Phenotype. Journal of Bacteriology, 1974, 120, 407-415.	2.2	111
24	Effect of recF, recJ, recN, recO and ruv mutations on ultraviolet survival and genetic recombination in a recD strain of Escherichia coli K12. Molecular Genetics and Genomics, 1988, 212, 317-324.	2.4	108
25	Nucleotide sequencing of theruvregion ofEscherichia coliK-12 reveals a LexA regulated operon encoding two genes. Nucleic Acids Research, 1988, 16, 1541-1549.	14.5	106
26	Purification and properties of the RuvA and RuvB proteins of Escherichia coli. Molecular Genetics and Genomics, 1992, 235, 1-10.	2.4	105
27	RecN protein and transcription factor DksA combine to promote faithful recombinational repair of DNA double-strand breaks. Molecular Microbiology, 2005, 57, 97-110.	2.5	100
28	The RecG Branch Migration Protein ofEscherichia coliDissociates R-loops. Journal of Molecular Biology, 1996, 264, 713-721.	4.2	88
29	Interactions Between RuvA and RuvC at Holliday Junctions: Inhibition of Junction Cleavage and Formation of a RuvA-RuvC-DNA Complex. Journal of Molecular Biology, 1996, 264, 878-890.	4.2	86
30	A model for dsDNA translocation revealed by a structural motif common to RecG and Mfd proteins. EMBO Journal, 2003, 22, 724-734.	7.8	85
31	Targeting Holliday Junctions by the RecG Branch Migration Protein of Escherichia coli. Journal of Biological Chemistry, 1998, 273, 19729-19739.	3.4	83
32	RecG helicase activity at three- and four-strand DNA structures. Nucleic Acids Research, 1999, 27, 3049-3056.	14.5	82
33	Genetic analysis and molecular cloning of the Escherichia coli ruv gene. Molecular Genetics and Genomics, 1984, 194, 322-329.	2.4	79
34	RecG helicase promotes DNA double-strand break repair. Molecular Microbiology, 2004, 52, 119-132.	2.5	74
35	Is RecG a general guardian of the bacterial genome?. DNA Repair, 2010, 9, 210-223.	2.8	74
36	Evidence of abortive recombination in ruv mutants of Escherichia coli K12. Molecular Genetics and Genomics, 1991, 225, 266-272.	2.4	73

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37	Proteinâ€"DNA complexes are the primary sources of replication fork pausing in <i>Escherichia coli</i>. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 7252-7257.	7.1	71
38	Altered SOS induction associated with mutations in recF, recO and recR. Molecular Genetics and Genomics, 1995, 246, 174-179.	2.4	70
39	Modulation of DNA repair by mutations flanking the DNA channel through RNA polymerase. EMBO Journal, 2002, 21, 6944-6953.	7.8	70
40	Replication fork stalling and cell cycle arrest in UV-irradiated Escherichia coli. Genes and Development, 2007, 21, 668-681.	5.9	69
41	Avoiding and resolving conflicts between DNA replication and transcription. DNA Repair, 2007, 6, 981-993.	2.8	69
42	Substrate Specificity of RusA Resolvase Reveals the DNA Structures Targeted by RuvAB and RecG In Vivo. Molecular Cell, 2002, 10, 187-198.	9.7	68
43	The genetic location of the sbcA gene of Escherichia coli. Molecular Genetics and Genomics, 1974, 134, 157-171.	2.4	65
44	Sequence Specificity and Biochemical Characterization of the RusA Holliday Junction Resolvase of Escherichia coli. Journal of Biological Chemistry, 1997, 272, 14873-14882.	3.4	65
45	Formation of recombinant lacZ + DNA in conjugational crosses with a recB mutant of Escherichia coli K12 depends on recF, recJ, and recO. Molecular Genetics and Genomics, 1987, 209, 135-141.	2.4	60
46	Rep and PriA helicase activities prevent RecA from provoking unnecessary recombination during replication fork repair. Genes and Development, 2006, 20, 2135-2147.	5.9	60
47	Action of RuvAB at Replication Fork Structures. Journal of Biological Chemistry, 2001, 276, 41938-41944.	3.4	58
48	Replication fork regression in vitro by the Werner syndrome protein (WRN): Holliday junction formation, the effect of leading arm structure and a potential role for WRN exonuclease activity. Nucleic Acids Research, 2007, 35, 5729-5747.	14.5	58
49	Localization of an accessory helicase at the replisome is critical in sustaining efficient genome duplication. Nucleic Acids Research, 2011, 39, 949-957.	14.5	55
50	Interplay between DNA replication, recombination and repair based on the structure of RecG helicase. Philosophical Transactions of the Royal Society B: Biological Sciences, 2004, 359, 49-59.	4.0	53
51	25Âyears on and no end in sight: a perspective on the role of RecG protein. Current Genetics, 2016, 62, 827-840.	1.7	51
52	On the nature of the RecBC and RecF pathways of conjugal recombination in Escherichia coli. Molecular Genetics and Genomics, 1983, 190, 156-161.	2.4	50
53	DNA Binding by the Substrate Specificity (Wedge) Domain of RecG Helicase Suggests a Role in Processivity. Journal of Biological Chemistry, 2005, 280, 13921-13927.	3.4	50
54	Replication fork collisions cause pathological chromosomal amplification in cells lacking RecG DNA translocase. Molecular Microbiology, 2009, 74, 940-955.	2.5	50

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55	Pathological replication in cells lacking RecG DNA translocase. Molecular Microbiology, 2009, 73, 352-366.	2.5	47
56	PriA supports two distinct pathways for replication restart in UV-irradiated Escherichia coli cells. Molecular Microbiology, 2003, 47, 1091-1100.	2.5	46
57	RecG Protein and Single-Strand DNA Exonucleases Avoid Cell Lethality Associated With PriA Helicase Activity in<i>Escherichia coli</i>. Genetics, 2010, 186, 473-492.	2.9	45
58	SOME GENETIC CONSEQUENCES OF CHANGES IN THE LEVEL OF recA GENE FUNCTION IN ESCHERICHIA COLI K-12. Genetics, 1976, 84, 675-695.	2.9	43
59	A molecular model for conjugational recombination in Escherichia coli K12. Molecular Genetics and Genomics, 1984, 197, 328-336.	2.4	42
60	lexA dependent recombination in uvrD strains of Escherichia coli. Molecular Genetics and Genomics, 1983, 189, 157-161.	2.4	41
61	The RuvABC resolvasome. FEBS Journal, 2002, 269, 5492-5501.	0.2	41
62	Genetic analysis of recombination in prokaryotes. Current Opinion in Genetics and Development, 1992, 2, 683-690.	3.3	37
63	A mutation in helicase motif III ofE.coliRecG protein abolishes branch migration of Holliday junctions. Nucleic Acids Research, 1994, 22, 308-313.	14.5	36
64	Chromosomal over-replication in Escherichia coli recG cells is triggered by replication fork fusion and amplified if replichore symmetry is disturbed. Nucleic Acids Research, 2018, 46, 7701-7715.	14.5	34
65	The RdgC protein of Escherichia coli binds DNA and counters a toxic effect of RecFOR in strains lacking the replication restart protein PriA. EMBO Journal, 2003, 22, 735-745.	7.8	33
66	On the viability of Escherichia colicells lacking DNA topoisomerase I. BMC Microbiology, 2012, 12, 26.	3.3	32
67	The recN locus of Escherichia coli K12: molecular analysis and identification of the gene product. Molecular Genetics and Genomics, 1985, 201, 301-307.	2.4	31
68	The mmsA locus of Streptococcus pneumoniae encodes a RecGâ€like protein involved in DNA repair and in threeâ€strand recombination. Molecular Microbiology, 1996, 19, 1035-1045.	2.5	31
69	Isolation of Recâ^ˆ' mutants from an F-prime merodiploid strain of Escherichia coli K-12. Molecular Genetics and Genomics, 1976, 143, 223-232.	2.4	27
70	Identification of three aspartic acid residues essential for catalysis by the RusA holliday junction resolvase 1 1Edited by A. R. Fersht. Journal of Molecular Biology, 1999, 286, 403-415.	4.2	27
71	Maintaining replication fork integrity in UV-irradiated Escherichia coli cells. DNA Repair, 2008, 7, 1589-1602.	2.8	27
72	Promoting and Avoiding Recombination: Contrasting Activities of the <i>Escherichia coli</i> RuvABC Holliday Junction Resolvase and RecG DNA Translocase. Genetics, 2010, 185, 23-37.	2.9	27

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73	RusA proteins from the extreme thermophile Aquifex aeolicus and lactococcal phage r1t resolve Holliday junctions. Molecular Microbiology, 2002, 44, 549-559.	2.5	24
74	The Structure of Escherichia coli RusA Endonuclease Reveals a New Holliday Junction DNA Binding Fold. Structure, 2003, 11, 1557-1567.	3.3	24
75	Structural similarities between Escherichia coli RuvA protein and other DNA-binding proteins and a mutational analysis of its binding to the holliday junction. Journal of Molecular Biology, 1998, 278, 105-116.	4.2	23
76	Holliday junction binding and processing by the RuvA protein of Mycoplasma pneumoniae. FEBS Journal, 2002, 269, 1525-1533.	0.2	21
77	Insights into the mechanisms of homologous recombination from the structure of RuvA. Current Opinion in Structural Biology, 1997, 7, 798-803.	5.7	20
78	RusA Holliday junction resolvase: DNA complex structureâ€"insights into selectivity and specificity. Nucleic Acids Research, 2006, 34, 5577-5584.	14.5	19
79	Sequence-specificity of holliday junction resolution: identification of RuvC mutants defective in metal binding and target site recognition. Journal of Molecular Biology, 1998, 281, 17-29.	4.2	17
80	AnE.coliRuvC mutant defective in cleavage of synthetic Holliday junctions. Nucleic Acids Research, 1993, 21, 3359-3364.	14.5	15
81	Conservation of RecG activity from pathogens to hyperthermophiles. DNA Repair, 2005, 4, 23-31.	2.8	14
82	Analysis of Strand Transfer and Template Switching Mechanisms of DNA Gap Repair by Homologous Recombination in Escherichia coli: Predominance of Strand Transfer. Journal of Molecular Biology, 2008, 381, 803-809.	4.2	14
83	Cellular location and activity of Escherichia coli RecG proteins shed light on the function of its structurally unresolved C-terminus. Nucleic Acids Research, 2014, 42, 5702-5714.	14.5	13
84	The Balance between Recombination Enzymes and Accessory Replicative Helicases in Facilitating Genome Duplication. Genes, 2016, 7, 42.	2.4	13
85	Modulation of DNA damage tolerance in E scherichia coli recG and ruv strains by mutations affecting PriB , the ribosome and RNA polymerase. Molecular Microbiology, 2012, 86, 675-691.	2.5	12
86	Inhibiting translation elongation can aid genome duplication in Escherichia coli. Nucleic Acids Research, 2017, 45, 2571-2584.	14.5	12
87	Analysis of conserved basic residues associated with DNA binding (Arg69) and catalysis (Lys76) by the RusA holliday junction resolvase. Journal of Molecular Biology, 2000, 304, 165-176.	4.2	11
88	Kinetics of recA function in conjugational recombinant formation. Molecular Genetics and Genomics, 1979, 169, 219-228.	2.4	10
89	Location of a mutation in the aspartyl-tRNA synthetae gene of Escherichia coli K12. Mutation Research-Fundamental and Molecular Mechanisms of Mutagenesis, 1991, 264, 93-96.	1.1	10
90	Genetic analysis of an archaeal Holliday junction resolvase in Escherichia coli 1 1Edited by J. Karn. Journal of Molecular Biology, 2001, 310, 577-589.	4.2	10

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91	Loss of Hfr DNA fromEscherichia colimerozygotes during inhibition of conjugation by nalidixic acid. Genetical Research, 1980, 36, 69-79.	0.9	9