Edward L Bolt

List of Publications by Year
in descending order

49 papers	1,504 citations	279798 23 h-index	330143 37 g-index
51 all docs	51 docs citations	51 times ranked	1458 citing authors

#	Article	IF	Citations
1	Gene dissection demonstrates that the Escherichia coli cysG gene encodes a multifunctional protein. Biochemical Journal, 1994, 302, 837-844.	3.7	109
2	Intrinsic sequence specificity of the Cas1 integrase directs new spacer acquisition. ELife, 2015, 4, .	6.0	104
3	Archaeal Hel308 helicase targets replication forks in vivo and in vitro and unwinds lagging strands. Nucleic Acids Research, 2005, 33, 3678-3690.	14.5	91
4	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
5	Different genome stability proteins underpin primed and naÃ¯ve adaptation inE. coliCRISPR-Cas immunity. Nucleic Acids Research, 2015, 43, 10821-10830.	14.5	86
6	Molecular insights into DNA interference by CRISPR-associated nuclease-helicase Cas3. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 16359-16364.	7.1	85
7	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
8	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
9	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
10	Helicase dissociation and annealing of RNA-DNA hybrids by Escherichia coli Cas3 protein. Biochemical Journal, 2011, 439, 85-95.	3.7	56
11	Interactions of RadB, a DNA Repair Protein in Archaea, with DNA and ATP. Journal of Molecular Biology, 2006, 358, 46-56.	4.2	38
12	Molecular biology of Hel308 helicase in archaea. Biochemical Society Transactions, 2009, 37, 74-78.	3.4	38
13	The role of Cas8Âin typeÂI CRISPR interference. Bioscience Reports, 2015, 35, .	2.4	37
14	Characterization of the Rhodobacter sphaeroides 5-aminolaevulinic acid synthase isoenzymes, HemA and HemT, isolated from recombinant Escherichia coli. FEBS Journal, 1999, 265, 290-299.	0.2	33
15	The Conjugative DNA Translocase TrwB Is a Structure-specific DNA-binding Protein. Journal of Biological Chemistry, 2010, 285, 17537-17544.	3.4	32
16	Cas3 is a limiting factor for CRISPR-Cas immunity in Escherichia coli cells lacking H-NS. BMC Microbiology, 2016, 16, 28.	3.3	30
17	A novel nuclease-ATPase (Nar71) from archaea is part of a proposed thermophilic DNA repair system. Nucleic Acids Research, 2004, 32, 6176-6186.	14.5	28
18	Tuning in to Interference: R-Loops and Cascade Complexes in CRISPR Immunity. Journal of Molecular Biology, 2012, 422, 607-616.	4.2	28

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19	Molecular Ageing of Alpha- and Beta-Synucleins: Protein Damage and Repair Mechanisms. PLoS ONE, 2013, 8, e61442.	2.5	28
20	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
21	CRISPRâ€“Cas adaptation in Escherichia coli requires RecBCD helicase but not nuclease activity, is independent of homologous recombination, and is antagonized by 5â€² ssDNA exonucleases. Nucleic Acids Research, 2018, 46, 10173-10183.	14.5	27
22	CRISPR-Cas immunity, DNA repair and genome stability. Bioscience Reports, 2018, 38, .	2.4	27
23	RusA proteins from the extreme thermophile Aquifex aeolicus and lactococcal phage r1t resolve Holliday junctions. Molecular Microbiology, 2002, 44, 549-559.	2.5	24
24	The Structure of Escherichia coli RusA Endonuclease Reveals a New Holliday Junction DNA Binding Fold. Structure, 2003, 11, 1557-1567.	3.3	24
25	Holliday Junction Binding and Resolution by the Rap Structure-specific Endonuclease of Phage Î». Journal of Molecular Biology, 2004, 340, 739-751.	4.2	24
26	Archaeal Hel308 Domain V Couples DNA Binding to ATP Hydrolysis and Positions DNA for Unwinding Over the Helicase Ratchet. Journal of Molecular Biology, 2007, 374, 1139-1144.	4.2	21
27	Physical interaction between archaeal DNA repair helicase Hel308 and Replication Protein A (RPA). DNA Repair, 2011, 10, 306-313.	2.8	21
28	Cas3 Proteinâ€”A Review of a Multi-Tasking Machine. Genes, 2020, 11, 208.	2.4	21
29	RusA Holliday junction resolvase: DNA complex structureâ€”insights into selectivity and specificity. Nucleic Acids Research, 2006, 34, 5577-5584.	14.5	19
30	Isoaspartate, carbamoyl phosphate synthase-1, and carbonic anhydrase-III as biomarkers of liver injury. Biochemical and Biophysical Research Communications, 2015, 458, 626-631.	2.1	19
31	DNA binding and unwinding by Hel308 helicase requires dual functions of a winged helix domain. DNA Repair, 2017, 57, 125-132.	2.8	16
32	Winged helix domains with unknown function in Hel308 and related helicases. Biochemical Society Transactions, 2011, 39, 140-144.	3.4	15
33	Cas3 stimulates runaway replication of a ColE1 plasmid inEscherichia coliand antagonises RNaseHI. RNA Biology, 2013, 10, 770-778.	3.1	13
34	DNA replication roadblocks caused by Cascade interference complexes are alleviated by RecG DNA repair helicase. RNA Biology, 2019, 16, 543-548.	3.1	13
35	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
36	CRISPR-Cas adaptive immunity and the three Rs. Bioscience Reports, 2017, 37, .	2.4	11

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37	The HelQ human DNA repair helicase utilizes a PWI-like domain for DNA loading through interaction with RPA, triggering DNA unwinding by the HelQ helicase core. NAR Cancer, 2021, 3, zcaa043.	3.1	11
38	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
39	A Gold Standard, CRISPR/Cas9-Based Complementation Strategy Reliant on 24 Nucleotide Bookmark Sequences. Genes, 2020, 11, 458.	2.4	10
40	Remodeling and Control of Homologous Recombination by DNA Helicases and Translocases that Target Recombinases and Synapsis. Genes, 2016, 7, 52.	2.4	8
41	Mechanistic insights into Lhr helicase function in DNA repair. Biochemical Journal, 2020, 477, 2935-2947.	3.7	7
42	Identification of Escherichia coli ygaQ and rpmG as novel mitomycin C resistance factors implicated in DNA repair. Bioscience Reports, 2016, 36, e00290.	2.4	5
43	Adaptation processes that build CRISPR immunity: creative destruction, updated. Essays in Biochemistry, 2019, 63, 227-235.	4.7	5
44	A Tryptophan â€˜Gateâ€™ in the CRISPR-Cas3 Nuclease Controls ssDNA Entry into the Nuclease Site, That When Removed Results in Nuclease Hyperactivity. International Journal of Molecular Sciences, 2021, 22, 2848.	4.1	5
45	Helicases that interact with replication forks: new candidates from archaea. Biochemical Society Transactions, 2005, 33, 1471.	3.4	3
46	Homologous recombination in Archaea: new Holliday junction helicases. Biochemical Society Transactions, 2003, 31, 703-705.	3.4	2
47	Integration of diverse DNA substrates by a casposase can be targeted to R-loops in vitro by its fusion to Cas9. Bioscience Reports, 2021, 41, .	2.4	2
48	Crystallization of RusA Holliday junction resolvase fromEscherichia coli. Acta Crystallographica Section D: Biological Crystallography, 2003, 59, 2262-2264.	2.5	1
49	Functions of Hel308 helicases in promoting genome stability in metazoans and archaea. FASEB Journal, 2006, 20, LB55.	0.5	0