

John R Roth

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/10592261/publications.pdf>

Version: 2024-02-01

77
papers

7,400
citations

87888

38
h-index

76900

74
g-index

77
all docs

77
docs citations

77
times ranked

5510
citing authors

#	ARTICLE	IF	CITATIONS
1	Selective Inbreeding: Genetic Crosses Drive Apparent Adaptive Mutation in the Cairns-Foster System of <i>Escherichia coli</i> . <i>Genetics</i> , 2020, 214, 333-354.	2.9	3
2	Integration of the pSLT Plasmid into the <i>Salmonella</i> Chromosome Results in a Temperature-Sensitive Growth Defect Due to Aberrant DNA Replication. <i>Journal of Bacteriology</i> , 2020, 202, .	2.2	0
3	Selection-Enhanced Mutagenesis of <i>lac</i> Genes Is Due to Their Coamplification with <i>dinB</i> Encoding an Error-Prone DNA Polymerase. <i>Genetics</i> , 2018, 208, 1009-1021.	2.9	5
4	Selection and Plasmid Transfer Underlie Adaptive Mutation in <i>Escherichia coli</i> . <i>Genetics</i> , 2018, 210, 821-841.	2.9	2
5	The Promiscuous <i>sumA</i> Missense Suppressor from <i>Salmonella enterica</i> Has an Intriguing Mechanism of Action. <i>Genetics</i> , 2017, 205, 577-588.	2.9	2
6	Reinterpreting Long-Term Evolution Experiments: Is Delayed Adaptation an Example of Historical Contingency or a Consequence of Intermittent Selection?. <i>Journal of Bacteriology</i> , 2016, 198, 1009-1012.	2.2	5
7	Mechanisms of Gene Duplication and Amplification. <i>Cold Spring Harbor Perspectives in Biology</i> , 2015, 7, a016592.	5.5	176
8	The Origin of Mutants Under Selection: How Natural Selection Mimics Mutagenesis (Adaptive) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 462	3.5	30
9	Plasmid Copy Number Underlies Adaptive Mutability in Bacteria. <i>Genetics</i> , 2014, 198, 919-933.	2.9	23
10	Evidence that a Metabolic Microcompartment Contains and Recycles Private Cofactor Pools. <i>Journal of Bacteriology</i> , 2013, 195, 2864-2879.	2.2	68
11	Multiple Pathways of Duplication Formation with and Without Recombination (<i>RecA</i>) in <i>Salmonella enterica</i> . <i>Genetics</i> , 2012, 192, 397-415.	2.9	31
12	Poxvirus Use a "Gene Accordion" to Tune Out Host Defenses. <i>Cell</i> , 2012, 150, 671-672.	28.9	7
13	Real-Time Evolution of New Genes by Innovation, Amplification, and Divergence. <i>Science</i> , 2012, 338, 384-387.	12.6	202
14	The joys and terrors of fast adaptation: new findings elucidate antibiotic resistance and natural selection. <i>Molecular Microbiology</i> , 2011, 79, 279-282.	2.5	15
15	Effect of Growth Under Selection on Appearance of Chromosomal Mutations in <i>Salmonella enterica</i> . <i>Genetics</i> , 2011, 189, 37-53.	2.9	13
16	Intestinal inflammation allows <i>Salmonella</i> to use ethanolamine to compete with the microbiota. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 17480-17485.	7.1	551
17	The Origin of Mutants under Selection: Interactions of Mutation, Growth, and Selection. <i>EcoSal Plus</i> , 2011, 4, .	5.4	13
18	Genetic Adaptation: A New Piece for a Very Old Puzzle. <i>Current Biology</i> , 2010, 20, R15-R17.	3.9	12

#	ARTICLE	IF	CITATIONS
19	Gut inflammation provides a respiratory electron acceptor for Salmonella. <i>Nature</i> , 2010, 467, 426-429.	27.8	1,036
20	Duplication Frequency in a Population of <i>Salmonella enterica</i> Rapidly Approaches Steady State With or Without Recombination. <i>Genetics</i> , 2010, 184, 1077-1094.	2.9	106
21	The Tandem Inversion Duplication in <i>Salmonella enterica</i> : Selection Drives Unstable Precursors to Final Mutation Types. <i>Genetics</i> , 2010, 185, 65-80.	2.9	43
22	One Pathway Can Incorporate either Adenine or Dimethylbenzimidazole as an \pm -Axial Ligand of B ₁₂ Cofactors in <i>Salmonella enterica</i> . <i>Journal of Bacteriology</i> , 2008, 190, 1160-1171.	2.2	59
23	Ohno's dilemma: Evolution of new genes under continuous selection. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 17004-17009.	7.1	313
24	Origin of Mutations Under Selection: The Adaptive Mutation Controversy. <i>Annual Review of Microbiology</i> , 2006, 60, 477-501.	7.3	158
25	Multiple pathways of selected gene amplification during adaptive mutation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 17319-17324.	7.1	89
26	The Amplification Model for Adaptive Mutation. <i>Genetics</i> , 2005, 169, 1105-1115.	2.9	25
27	Rebuttal: Adaptive Mutation in <i>Escherichia coli</i> (Foster). <i>Journal of Bacteriology</i> , 2004, 186, 4854-4854.	2.2	6
28	Rebuttal: Adaptive Point Mutation (Rosenberg and Hastings). <i>Journal of Bacteriology</i> , 2004, 186, 4844-4844.	2.2	8
29	Adaptive Mutation: How Growth under Selection Stimulates Lac ⁺ Reversion by Increasing Target Copy Number. <i>Journal of Bacteriology</i> , 2004, 186, 4855-4860.	2.2	35
30	Amplification "mutagenesis" how growth under selection contributes to the origin of genetic diversity and explains the phenomenon of adaptive mutation. <i>Research in Microbiology</i> , 2004, 155, 342-351.	2.1	35
31	Adaptive mutation: General mutagenesis is not a programmed response to stress but results from rare coamplification of <i>dinB</i> with <i>lac</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 12847-12852.	7.1	82
32	Formation of an F ² Plasmid by Recombination between Imperfectly Repeated Chromosomal Rep Sequences: a Closer Look at an Old Friend (F ² 128 pro lac). <i>Journal of Bacteriology</i> , 2003, 185, 660-663.	2.2	44
33	Regulating General Mutation Rates: Examination of the Hypermutable State Model for Cairnsian Adaptive Mutation. <i>Genetics</i> , 2003, 163, 1483-1496.	2.9	55
34	Adaptive Mutation Requires No Mutagenesis "Only Growth Under Selection: A Response. <i>Genetics</i> , 2003, 165, 2319-2321.	2.9	6
35	Amplification "mutagenesis: Evidence that "directed" adaptive mutation and general hypermutability result from growth with a selected gene amplification. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002, 99, 2164-2169.	7.1	159
36	Effect of Chromosome Location on Bacterial Mutation Rates. <i>Molecular Biology and Evolution</i> , 2002, 19, 85-92.	8.9	40

#	ARTICLE	IF	CITATIONS
37	The effect of genomic position on reversion of a <i>lacZ</i> frameshift mutation (<i>lacZ33</i>) during nonlethal selection (adaptive mutation). <i>Molecular Microbiology</i> , 2002, 44, 1017-1032.	2.5	30
38	Evidence That Selected Amplification of a Bacterial <i>lac</i> Frameshift Allele Stimulates Lac ⁺ Reversion (Adaptive Mutation) With or Without General Hypermutability. <i>Genetics</i> , 2002, 161, 945-956.	2.9	33
39	The Alternative Electron Acceptor Tetrathionate Supports B ₁₂ -Dependent Anaerobic Growth of <i>Salmonella enterica</i> Serovar Typhimurium on Ethanolamine or 1,2-Propanediol. <i>Journal of Bacteriology</i> , 2001, 183, 2463-2475.	2.2	194
40	A New Class of Cobalamin Transport Mutants (<i>btuF</i>) Provides Genetic Evidence for a Periplasmic Binding Protein in <i>Salmonella typhimurium</i> . <i>Journal of Bacteriology</i> , 1999, 181, 5539-5541.	2.2	26
41	Evidence That Gene Amplification Underlies Adaptive Mutability of the Bacterial <i>lac</i> Operon. <i>Science</i> , 1998, 282, 1133-1135.	12.6	175
42	Evolution of Coenzyme B ₁₂ Synthesis Among Enteric Bacteria: Evidence for Loss and Reacquisition of a Multigene Complex. <i>Genetics</i> , 1996, 142, 11-24.	2.9	114
43	A Search for a General Phenomenon of Adaptive Mutability. <i>Genetics</i> , 1996, 143, 645-659.	2.9	52
44	Selfish Operons: Horizontal Transfer May Drive the Evolution of Gene Clusters. <i>Genetics</i> , 1996, 143, 1843-1860.	2.9	590
45	The <i>Salmonella typhimurium</i> RecJ function permits growth of P22 abc phage on recBCD ⁺ hosts. <i>Molecular Genetics and Genomics</i> , 1992, 232, 470-478.	2.4	15
46	Absence of insertions among spontaneous mutants of <i>Salmonella typhimurium</i> . <i>Molecular Genetics and Genomics</i> , 1989, 216, 210-216.	2.4	44
47	Heme-deficient mutants of <i>Salmonella typhimurium</i> : Two genes required for ALA synthesis. <i>Molecular Genetics and Genomics</i> , 1989, 216, 303-314.	2.4	48
48	A Novel P22 Prophage in <i>Salmonella typhimurium</i> . <i>Genetics</i> , 1987, 117, 367-380.	2.9	21
49	Structural and functional studies of insertion element IS200. <i>Journal of Molecular Biology</i> , 1986, 187, 157-167.	4.2	43
50	Target sequences for mutagenesis in <i>Salmonella</i> histidine-requiring mutants. <i>Environmental Mutagenesis</i> , 1986, 8, 631-641.	1.4	114
51	DIRECTED FORMATION OF DELETIONS AND DUPLICATIONS USING <i>Mu</i> (<i>Ap</i> , <i>lac</i>). <i>Genetics</i> , 1985, 109, 263-282.	2.9	83
52	IS200: A salmonella-specific insertion sequence. <i>Cell</i> , 1983, 34, 951-960.	28.9	146
53	NEW SUPPRESSORS OF FRAMESHIFT MUTATIONS IN <i>SALMONELLA TYPHIMURIUM</i> . <i>Genetics</i> , 1983, 103, 23-29.	2.9	14
54	GENETIC CHARACTERIZATION OF THE <i>SufJ</i> FRAMESHIFT SUPPRESSOR IN <i>SALMONELLA TYPHIMURIUM</i> . <i>Genetics</i> , 1983, 103, 31-42.	2.9	27

#	ARTICLE	IF	CITATIONS
55	GENETIC METHODS FOR ANALYSIS AND MANIPULATION OF INVERSION MUTATIONS IN BACTERIA. <i>Genetics</i> , 1983, 105, 517-537.	2.9	48
56	SELECTION AND ENDPOINT DISTRIBUTION OF BACTERIAL INVERSION MUTATIONS. <i>Genetics</i> , 1983, 105, 539-557.	2.9	58
57	GENETIC MAPPING OF IS200 COPIES IN SALMONELLA TYPHIMURIM STRAIN LT2. <i>Genetics</i> , 1983, 105, 801-811.	2.9	32
58	Genetic fusions that place the lactose genes under histidine operon control. <i>Journal of Molecular Biology</i> , 1981, 145, 697-712.	4.2	13
59	Genetic analysis of the histidine operon control region of <i>Salmonella typhimurium</i> . <i>Journal of Molecular Biology</i> , 1981, 145, 713-734.	4.2	42
60	DNA sequence changes of mutations altering attenuation control of the histidine operon of <i>Salmonella typhimurium</i> . <i>Journal of Molecular Biology</i> , 1981, 145, 735-756.	4.2	83
61	Four-base codons ACCA, ACCU and ACCC are recognized by frameshift suppressor <i>sufJ</i> . <i>Cell</i> , 1981, 25, 489-496.	28.9	92
62	The influence of codon context on genetic code translation. <i>Nature</i> , 1980, 286, 123-127.	27.8	308
63	REARRANGEMENT OF THE BACTERIAL CHROMOSOME USING Tn10 AS A REGION OF HOMOLOGY. <i>Genetics</i> , 1980, 94, 1-14.	2.9	47
64	CIRCULARIZATION OF TRANSDUCED FRAGMENTS: A MECHANISM FOR ADDING SEGMENTS TO THE BACTERIAL CHROMOSOME. <i>Genetics</i> , 1980, 94, 15-29.	2.9	27
65	Hfr FORMATION DIRECTED BY Tn10. <i>Genetics</i> , 1979, 91, 639-655.	2.9	280
66	HISTIDINE MUTANTS REQUIRING ADENINE: SELECTION OF MUTANTS WITH REDUCED <i>hisG</i> EXPRESSION IN <i>SALMONELLA TYPHIMURIUM</i> . <i>Genetics</i> , 1979, 92, 1-15.	2.9	59
67	Tandem chromosomal duplications in <i>Salmonella typhimurium</i> : Fusion of histidine genes to novel promoters. <i>Journal of Molecular Biology</i> , 1978, 119, 147-166.	4.2	119
68	A <i>Salmonella</i> frameshift suppressor that acts at runs of a residues in the messenger RNA. <i>Journal of Molecular Biology</i> , 1978, 126, 37-52.	4.2	36
69	Histidine Regulation in <i>Salmonella typhimurium</i> VIII. Mutations of the <i>hisT</i> Gene. <i>Journal of Bacteriology</i> , 1971, 108, 410-414.	2.2	59
70	Suppressors of frameshift mutations in <i>Salmonella typhimurium</i> . <i>Journal of Molecular Biology</i> , 1970, 54, 131-144.	4.2	96
71	Histidine and Aromatic Permeases of <i>Salmonella typhimurim</i> . <i>Journal of Bacteriology</i> , 1968, 96, 1742-1749.	2.2	111
72	Histidine regulatory mutants in <i>Salmonella typhimurium</i> . <i>Journal of Molecular Biology</i> , 1966, 22, 305-323.	4.2	313

#	ARTICLE	IF	CITATIONS
73	Histidine regulatory mutants in <i>Salmonella typhimurium</i> . <i>Journal of Molecular Biology</i> , 1966, 22, 325-334.	4.2	200
74	ORIENTATION OF THE ISOLEUCINE-VALINE GENES IN THE <i>SALMONELLA TYPHIMURIUM</i> LINKAGE MAP. <i>Genetics</i> , 1966, 53, 971-976.	2.9	28
75	Heterogeneity in P22 transducing particles. <i>Virology</i> , 1965, 27, 297-307.	2.4	82
76	Where's the Beef? Looking for Information in Bacterial Chromosomes. , 0, , 1-18.		2
77	Genomic Flux: Genome Evolution by Gene Loss and Acquisition. , 0, , 263-289.		39