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	Gut inflammation provides a respiratory electron acceptor for Salmonella. Nature, 2010, 467, 426-429.	27.8	1,036
2	Selfish Operons: Horizontal Transfer May Drive the Evolution of Gene Clusters. Genetics, 1996, 143, 1843-1860.	2.9	590
3	Intestinal inflammation allows <i>Salmonella</i> to use ethanolamine to compete with the microbiota. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 17480-17485.	7.1	551
4	Histidine regulatory mutants in Salmonella typhimurium. Journal of Molecular Biology, 1966, 22, 305-323.	4.2	313
5	Ohno's dilemma: Evolution of new genes under continuous selection. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 17004-17009.	7.1	313
6	The influence of codon context on genetic code translation. Nature, 1980, 286, 123-127.	27.8	308
7	Hfr FORMATION DIRECTED BY Tn10. Genetics, 1979, 91, 639-655.	2.9	280
8	Real-Time Evolution of New Genes by Innovation, Amplification, and Divergence. Science, 2012, 338, 384-387.	12.6	202
9	Histidine regulatory mutants in Salmonella typhimurium. Journal of Molecular Biology, 1966, 22, 325-334.	4.2	200
10	The Alternative Electron Acceptor Tetrathionate Supports B 12 -Dependent Anaerobic Growth of Salmonella enterica Serovar Typhimurium on Ethanolamine or 1,2-Propanediol. Journal of Bacteriology, 2001, 183, 2463-2475.	2.2	194
11	Mechanisms of Gene Duplication and Amplification. Cold Spring Harbor Perspectives in Biology, 2015, 7, a016592.	5.5	176
12	Evidence That Gene Amplification Underlies Adaptive Mutability of the Bacterial <i>lac</i> Operon. Science, 1998, 282, 1133-1135.	12.6	175
13	Amplificationâ€“mutagenesis: Evidence that â€œdirectedâ€•adaptive mutation and general hypermutability result from growth with a selected gene amplification. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 2164-2169.	7.1	159
14	Origin of Mutations Under Selection: The Adaptive Mutation Controversy. Annual Review of Microbiology, 2006, 60, 477-501.	7.3	158
15	IS200: A salmonella-specific insertion sequence. Cell, 1983, 34, 951-960.	28.9	146
16	Tandem chromosomal duplications in Salmonella typhimurium: Fusion of histidine genes to novel promoters. Journal of Molecular Biology, 1978, 119, 147-166.	4.2	119
17	Target sequences for mutagenesis inSalmonella histidine-requiring mutants. Environmental Mutagenesis, 1986, 8, 631-641.	1.4	114
18	Evolution of Coenzyme B12 Synthesis Among Enteric Bacteria: Evidence for Loss and Reacquisition of a Multigene Complex. Genetics, 1996, 142, 11-24.	2.9	114

#	ARTICLE	IF	CITATIONS
19	Histidine and Aromatic Permeases of <i>Salmonella typhimurim</i>. Journal of Bacteriology, 1968, 96, 1742-1749.	2.2	111
20	Duplication Frequency in a Population of <i>Salmonella enterica</i> Rapidly Approaches Steady State With or Without Recombination. Genetics, 2010, 184, 1077-1094.	2.9	106
21	Suppressors of frameshift mutations in Salmonella typhimurium. Journal of Molecular Biology, 1970, 54, 131-144.	4.2	96
22	Four-base codons ACCA, ACCU and ACCC are recognized by frameshift suppressor sufJ. Cell, 1981, 25, 489-496.	28.9	92
23	Multiple pathways of selected gene amplification during adaptive mutation. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 17319-17324.	7.1	89
24	DNA sequence changes of mutations altering attenuation control of the histidine operon of Salmonella typhimurium. Journal of Molecular Biology, 1981, 145, 735-756.	4.2	83
25	DIRECTED FORMATION OF DELETIONS AND DUPLICATIONS USING Mu<i>d</i>(Ap, <i>lac</i>). Genetics, 1985, 109, 263-282.	2.9	83
26	Heterogeneity in P22 transducing particles. Virology, 1965, 27, 297-307.	2.4	82
27	Adaptive mutation: General mutagenesis is not a programmed response to stress but results from rare coamplification of <i>dinB</i> with <i>lac</i>. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 12847-12852.	7.1	82
28	Evidence that a Metabolic Microcompartment Contains and Recycles Private Cofactor Pools. Journal of Bacteriology, 2013, 195, 2864-2879.	2.2	68
29	One Pathway Can Incorporate either Adenine or Dimethylbenzimidazole as an Î±-Axial Ligand of B ₁₂ Cofactors in <i>Salmonella enterica</i>. Journal of Bacteriology, 2008, 190, 1160-1171.	2.2	59
30	HISTIDINE MUTANTS REQUIRING ADENINE: SELECTION OF MUTANTS WITH REDUCED <i>hisG</i> EXPRESSION IN <i>SALMONELLA TYPHIMURIUM</i>. Genetics, 1979, 92, 1-15.	2.9	59
31	Histidine Regulation in <i>Salmonella typhimurium</i> VIII. Mutations of the <i>hisT</i> Gene. Journal of Bacteriology, 1971, 108, 410-414.	2.2	59
32	SELECTION AND ENDPOINT DISTRIBUTION OF BACTERIAL INVERSION MUTATIONS. Genetics, 1983, 105, 539-557.	2.9	58
33	Regulating General Mutation Rates: Examination of the Hypermutable State Model for Cairnsian Adaptive Mutation. Genetics, 2003, 163, 1483-1496.	2.9	55
34	A Search for a General Phenomenon of Adaptive Mutability. Genetics, 1996, 143, 645-659.	2.9	52
35	Heme-deficient mutants of Salmonella typhimurium: Two genes required for ALA synthesis. Molecular Genetics and Genomics, 1989, 216, 303-314.	2.4	48
36	GENETIC METHODS FOR ANALYSIS AND MANIPULATION OF INVERSION MUTATIONS IN BACTERIA. Genetics, 1983, 105, 517-537.	2.9	48

#	ARTICLE	IF	CITATIONS
37	REARRANGEMENT OF THE BACTERIAL CHROMOSOME USING Tn<i>10</i> AS A REGION OF HOMOLOGY. Genetics, 1980, 94, 1-14.	2.9	47
38	Absence of insertions among spontaneous mutants of Salmonella typhimurium. Molecular Genetics and Genomics, 1989, 216, 210-216.	2.4	44
39	Formation of an Fâ€² Plasmid by Recombination between Imperfectly Repeated Chromosomal Rep Sequences: a Closer Look at an Old Friend (Fâ€² 128 pro lac). Journal of Bacteriology, 2003, 185, 660-663.	2.2	44
40	Structural and functional studies of insertion element IS200. Journal of Molecular Biology, 1986, 187, 157-167.	4.2	43
41	The Tandem Inversion Duplication in<i>Salmonella enterica</i>: Selection Drives Unstable Precursors to Final Mutation Types. Genetics, 2010, 185, 65-80.	2.9	43
42	Genetic analysis of the histidine operon control region of Salmonella typhimurium. Journal of Molecular Biology, 1981, 145, 713-734.	4.2	42
43	Effect of Chromosome Location on Bacterial Mutation Rates. Molecular Biology and Evolution, 2002, 19, 85-92.	8.9	40
44	Genomic Flux: Genome Evolution by Gene Loss and Acquisition. , 0, , 263-289.		39
45	A Salmonella frameshift suppressor that acts at runs of a residues in the messenger RNA. Journal of Molecular Biology, 1978, 126, 37-52.	4.2	36
46	Adaptive Mutation: How Growth under Selection Stimulates Lac+ Reversion by Increasing Target Copy Number. Journal of Bacteriology, 2004, 186, 4855-4860.	2.2	35
47	Amplificationâ€“mutagenesisâ€”how growth under selection contributes to the origin of genetic diversity and explains the phenomenon of adaptive mutation. Research in Microbiology, 2004, 155, 342-351.	2.1	35
48	Evidence That Selected Amplification of a Bacterial <i>lac</i> Frameshift Allele Stimulates Lac+ Reversion (Adaptive Mutation) With or Without General Hypermutability. Genetics, 2002, 161, 945-956.	2.9	33
49	GENETIC MAPPING OF IS200 COPIES IN SALMONELLA TYPHIMURIM STRAIN LT2. Genetics, 1983, 105, 801-811.	2.9	32
50	Multiple Pathways of Duplication Formation with and Without Recombination (RecA) in <i>Salmonella enterica</i>. Genetics, 2012, 192, 397-415.	2.9	31
51	The effect of genomic position on reversion of a <i>lac</i> frameshift mutation (<i>lacIZ33</i>) during nonâ€lethal selection (adaptive mutation). Molecular Microbiology, 2002, 44, 1017-1032.	2.5	30
52	The Origin of Mutants Under Selection: How Natural Selection Mimics Mutagenesis (Adaptive) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 14	5.5	30
53	ORIENTATION OF THE ISOLEUCINE-VALINE GENES IN THE SALMONELLA TYPHIMURIUM LINKAGE MAP. Genetics, 1966, 53, 971-976.	2.9	28
54	GENETIC CHARACTERIZATION OF THE <i>SufJ</i> FRAMESHIFT SUPPRESSOR IN <i>SALMONELLA TYPHIMURIUM</i>. Genetics, 1983, 103, 31-42.	2.9	27

#	ARTICLE	IF	CITATIONS
55	CIRCULARIZATION OF TRANSDUCED FRAGMENTS: A MECHANISM FOR ADDING SEGMENTS TO THE BACTERIAL CHROMOSOME. Genetics, 1980, 94, 15-29.	2.9	27
56	A New Class of Cobalamin Transport Mutants (btuF) Provides Genetic Evidence for a Periplasmic Binding Protein in Salmonella typhimurium. Journal of Bacteriology, 1999, 181, 5539-5541.	2.2	26
57	The Amplification Model for Adaptive Mutation. Genetics, 2005, 169, 1105-1115.	2.9	25
58	Plasmid Copy Number Underlies Adaptive Mutability in Bacteria. Genetics, 2014, 198, 919-933.	2.9	23
59	A Novel P22 Prophage in <i>Salmonella typhimurium</i>. Genetics, 1987, 117, 367-380.	2.9	21
60	The Salmonella typbimurium RecJ function permits growth of P22 abc phage on recBCD + hosts. Molecular Genetics and Genomics, 1992, 232, 470-478.	2.4	15
61	The joys and terrors of fast adaptation: new findings elucidate antibiotic resistance and natural selection. Molecular Microbiology, 2011, 79, 279-282.	2.5	15
62	NEW SUPPRESSORS OF FRAMESHIFT MUTATIONS IN <i>SALMONELLA TYPHIMURIUM</i>. Genetics, 1983, 103, 23-29.	2.9	14
63	Genetic fusions that place the lactose genes under histidine operon control. Journal of Molecular Biology, 1981, 145, 697-712.	4.2	13
64	Effect of Growth Under Selection on Appearance of Chromosomal Mutations in<i>Salmonella enterica</i>. Genetics, 2011, 189, 37-53.	2.9	13
65	The Origin of Mutants under Selection: Interactions of Mutation, Growth, and Selection. EcoSal Plus, 2011, 4, .	5.4	13
66	Genetic Adaptation: A New Piece for a Very Old Puzzle. Current Biology, 2010, 20, R15-R17.	3.9	12
67	Rebuttal: Adaptive Point Mutation (Rosenberg and Hastings). Journal of Bacteriology, 2004, 186, 4844-4844.	2.2	8
68	Poxvirus Use a â€œGene Accordionâ€• to Tune Out Host Defenses. Cell, 2012, 150, 671-672.	28.9	7
69	Rebuttal: Adaptive Mutation in Escherichia coli (Foster). Journal of Bacteriology, 2004, 186, 4854-4854.	2.2	6
70	Adaptive Mutation Requires No Mutagenesisâ€”Only Growth Under Selection: A Response. Genetics, 2003, 165, 2319-2321.	2.9	6
71	Reinterpreting Long-Term Evolution Experiments: Is Delayed Adaptation an Example of Historical Contingency or a Consequence of Intermittent Selection?. Journal of Bacteriology, 2016, 198, 1009-1012.	2.2	5
72	Selection-Enhanced Mutagenesis of <i>lac</i> Genes Is Due to Their Coamplification with <i>dinB</i> Encoding an Error-Prone DNA Polymerase. Genetics, 2018, 208, 1009-1021.	2.9	5

#	ARTICLE	IF	CITATIONS
73	Selective Inbreeding: Genetic Crosses Drive Apparent Adaptive Mutation in the Cairns-Foster System of<i>Escherichia coli</i>. Genetics, 2020, 214, 333-354.	2.9	3
74	The Promiscuous sumA Missense Suppressor from Salmonella enterica Has an Intriguing Mechanism of Action. Genetics, 2017, 205, 577-588.	2.9	2
75	Selection and Plasmid Transfer Underlie Adaptive Mutation in Escherichia coli. Genetics, 2018, 210, 821-841.	2.9	2
76	Where's the Beef? Looking for Information in Bacterial Chromosomes. , 0, , 1-18.		2
77	Integration of the pSLT Plasmid into the Salmonella Chromosome Results in a Temperature-Sensitive Growth Defect Due to Aberrant DNA Replication. Journal of Bacteriology, 2020, 202, .	2.2	0