

# Daniel E Dykhuizen

## List of Publications by Year in descending order

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Version: 2024-02-01

48  
papers

4,188  
citations

172207

29  
h-index

223531

46  
g-index

48  
all docs

48  
docs citations

48  
times ranked

3406  
citing authors

#	ARTICLE	IF	CITATIONS
1	LIMITS OF ADAPTATION: THE EVOLUTION OF SELECTIVE NEUTRALITY. <i>Genetics</i> , 1985, 111, 655-674.	1.2	279
2	Genetic Diversity of ospC in a Local Population of <i>Borrelia burgdorferi sensu stricto</i> . <i>Genetics</i> , 1999, 151, 15-30.	1.2	273
3	Four Clones of <i>Borrelia burgdorferi</i> Sensu Stricto Cause Invasive Infection in Humans. <i>Infection and Immunity</i> , 1999, 67, 3518-3524.	1.0	260
4	Santa Rosalia revisited: why are there so many species of bacteria?. , 1998, 73, 25-33.		245
5	ospC Diversity in <i>Borrelia burgdorferi</i> . <i>Genetics</i> , 2004, 168, 713-722.	1.2	245
6	Metabolic Flux and Fitness. <i>Genetics</i> , 1987, 115, 25-31.	1.2	242
7	Geographic Uniformity of the Lyme Disease Spirochete ( <i>Borrelia burgdorferi</i> ) and Its Shared History With Tick Vector ( <i>Ixodes scapularis</i> ) in the Northeastern United States. <i>Genetics</i> , 2002, 160, 833-849.	1.2	215
8	Pathoadaptive mutations: gene loss and variation in bacterial pathogens. <i>Trends in Microbiology</i> , 1999, 7, 191-195.	3.5	205
9	The Cost of Expression of <i>Escherichia coli lac</i> Operon Proteins Is in the Process, Not in the Products. <i>Genetics</i> , 2008, 178, 1653-1660.	1.2	187
10	Conspicuous impacts of inconspicuous hosts on the Lyme disease epidemic. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2008, 275, 227-235.	1.2	179
11	Experimental Studies of Natural Selection in Bacteria. <i>Annual Review of Ecology, Evolution, and Systematics</i> , 1990, 21, 373-398.	6.7	178
12	The evolution of phage lysis timing. <i>Evolutionary Ecology</i> , 1996, 10, 545-558.	0.5	168
13	Distribution and Abundance of Insertion Sequences Among Natural Isolates of <i>Escherichia coli</i> . <i>Genetics</i> , 1987, 115, 51-63.	1.2	153
14	Source-sink dynamics of virulence evolution. <i>Nature Reviews Microbiology</i> , 2006, 4, 548-555.	13.6	134
15	Enzyme activity and fitness: Evolution in solution. <i>Trends in Ecology and Evolution</i> , 1990, 5, 257-262.	4.2	114
16	The implications of a low rate of horizontal transfer in <i>Borrelia</i> . <i>Trends in Microbiology</i> , 2001, 9, 344-350.	3.5	105
17	High frequency of hotspot mutations in core genes of <i>Escherichia coli</i> due to short-term positive selection. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 12412-12417.	3.3	95
18	Fitness as a function of $\beta$ -galactosidase activity in <i>Escherichia coli</i> . <i>Genetical Research</i> , 1986, 48, 1-8.	0.3	91

#	ARTICLE	IF	CITATIONS
19	Evolutionary genomics of ecological specialization. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 11719-11724.	3.3	86
20	FUNCTIONAL EFFECTS OF PGI ALLOZYMES IN <i>ESCHERICHIA COLI</i> . Genetics, 1983, 105, 1-18.	1.2	71
21	The propensity of different <i>Borrelia burgdorferi</i> sensu stricto genotypes to cause disseminated infections in humans. American Journal of Tropical Medicine and Hygiene, 2008, 78, 806-10.	0.6	71
22	Infection With Multiple Strains of <i>Borrelia burgdorferi</i> Sensu Stricto in Patients With Lyme Disease. Archives of Dermatology, 1999, 135, 1329-33.	1.7	46
23	Evolution of Northeastern and Midwestern <i>Borrelia burgdorferi</i> , United States. Emerging Infectious Diseases, 2010, 16, 911-917.	2.0	46
24	[45] Chemostats used for studying natural selection and adaptive evolution. Methods in Enzymology, 1993, 224, 613-631.	0.4	42
25	Enterobacterial adhesins and the case for studying SNPs in bacteria. Trends in Microbiology, 2003, 11, 115-117.	3.5	42
26	Evolution of Specialists in an Experimental Microcosm. Genetics, 2004, 167, 2015-2026.	1.2	40
27	Enzyme Kinetics, Substitutable Resources and Competition: From Biochemistry to Frequency-Dependent Selection in <i>lac</i> . Genetics, 2002, 162, 485-499.	1.2	37
28	A MODEST MODEL EXPLAINS THE DISTRIBUTION AND ABUNDANCE OF BORRELIA BURGDORFERI STRAINS. American Journal of Tropical Medicine and Hygiene, 2006, 74, 615-622.	0.6	35
29	Selection for functional diversity drives accumulation of point mutations in Dr adhesins of <i>Escherichia coli</i> . Molecular Microbiology, 2007, 64, 180-194.	1.2	32
30	Recombinant Chimeric <i>Borrelia</i> Proteins for Diagnosis of Lyme Disease. Journal of Clinical Microbiology, 2000, 38, 2530-2535.	1.8	32
31	Evolution of Resistance to Continuously Increasing Streptomycin Concentrations in Populations of <i>Escherichia coli</i> . Antimicrobial Agents and Chemotherapy, 2016, 60, 1336-1342.	1.4	28
32	A modest model explains the distribution and abundance of <i>Borrelia burgdorferi</i> strains. American Journal of Tropical Medicine and Hygiene, 2006, 74, 615-22.	0.6	26
33	Predicted fitness changes along an environmental gradient. Evolutionary Ecology, 1994, 8, 524-541.	0.5	24
34	Transcription, Translation, and the Evolution of Specialists and Generalists. Molecular Biology and Evolution, 2009, 26, 2661-2678.	3.5	20
35	JOINT DISTRIBUTION OF INSERTION ELEMENTS IS4 AND IS5 IN NATURAL ISOLATES OF <i>ESCHERICHIA COLI</i> . Genetics, 1985, 111, 219-231.	1.2	18
36	Methods for Estimating Gene Frequencies and Detecting Selection in Bacterial Populations. Genetics, 2000, 155, 499-508.	1.2	17

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37	THE INCREASED POTENTIAL FOR SELECTION OF THE <i>LAC</i> OPERON OF <i>ESCHERICHIA COLI</i> . Evolution; International Journal of Organic Evolution, 1993, 47, 741-749.	1.1	16
38	Different adaptive strategies in <i>E. coli</i> populations evolving under macronutrient limitation and metal ion limitation. BMC Evolutionary Biology, 2018, 18, 72.	3.2	16
39	Evolutionary implications of Liebig's law of the minimum: Selection under low concentrations of two nonsubstitutable nutrients. Ecology and Evolution, 2017, 7, 5296-5309.	0.8	14
40	SIZE DOESN'T MATTER: MICROBIAL SELECTION EXPERIMENTS ADDRESS ECOLOGICAL PHENOMENA. Ecology, 2003, 84, 1679-1687.	1.5	13
41	SPECIFIC DELETION OCCURRING IN THE DIRECTED EVOLUTION OF 6-PHOSPHOGLUCONATE DEHYDROGENASE IN <i>ESCHERICHIA COLI</i> . Genetics, 1984, 108, 765-772.	1.2	12
42	The effects of species properties and community context on establishment success. Oikos, 2015, 124, 355-363.	1.2	10
43	Potential for hitchhiking in the <i>eda-edd-zwf</i> gene cluster of <i>Escherichia coli</i> . Genetical Research, 1984, 43, 229-239.	0.3	8
44	Accessory DNAs in the Bacterial Gene Pool: Playground for Coevolution. Novartis Foundation Symposium, 1984, 102, 233-252.	1.2	8
45	Mountaineering with microbes. Nature, 1990, 346, 15-16.	13.7	4
46	Pathogen population structure can explain hospital outbreaks. ISME Journal, 2018, 12, 2835-2843.	4.4	4
47	Waste and Yet Want Not. Molecular Cell, 2010, 38, 625-626.	4.5	2
48	VARIATION OF ENZYME ACTIVITIES AT A BRANCHED PATHWAY INVOLVED IN THE UTILIZATION OF GLUCONATE IN <i>ESCHERICHIA COLI</i> . Evolution; International Journal of Organic Evolution, 2007, 55, 897-908.	1.1	0