

# Michael J Mcdonald

## List of Publications by Year in descending order

Source: [//exaly.com/author-pdf/5141363/publications.pdf](https://exaly.com/author-pdf/5141363/publications.pdf)

Version: 2024-02-01

28  
papers

2,130  
citations

441845

17  
h-index

537477

26  
g-index

31  
all docs

31  
docs citations

31  
times ranked

3585  
citing authors

#	ARTICLE	IF	CITATIONS
1	Horizontal gene transfer facilitates the molecular reverse-evolution of antibiotic sensitivity in experimental populations of <i>H. pylori</i> . <i>Nature Ecology and Evolution</i> , 2024, 8, 315-324.	8.0	2
2	Species interactions constrain adaptation and preserve ecological stability in an experimental microbial community. <i>ISME Journal</i> , 2022, 16, 1442-1452.	10.0	28
3	Recombination resolves the cost of horizontal gene transfer in experimental populations of <i>Helicobacter pylori</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, e2119010119.	7.6	12
4	Polymyxin dose tunes the evolutionary dynamics of resistance in multidrug-resistant <i>Acinetobacter baumannii</i> . <i>Clinical Microbiology and Infection</i> , 2022, 28, 1026.e1-1026.e5.	6.5	7
5	Long-term experimental evolution decouples size and production costs in <i>Escherichia coli</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	7.6	24
6	Bacteriophages evolve enhanced persistence to a mucosal surface. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	7.6	21
7	The evolution of coexistence from competition in experimental co-cultures of <i>Escherichia coli</i> and <i>Saccharomyces cerevisiae</i> . <i>ISME Journal</i> , 2021, 15, 746-761.	10.0	26
8	Host diversity slows bacteriophage adaptation by selecting generalists over specialists. <i>Nature Ecology and Evolution</i> , 2021, 5, 350-359.	8.0	39
9	Phenotypic and molecular evolution across 10,000 generations in laboratory budding yeast populations. <i>ELife</i> , 2021, 10, .	5.9	69
10	Horizontal gene transfer potentiates adaptation by reducing selective constraints on the spread of genetic variation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 26868-26875.	7.6	60
11	Sex alters molecular evolution in diploid experimental populations of <i>S. cerevisiae</i> . <i>Nature Ecology and Evolution</i> , 2020, 4, 453-460.	8.0	20
12	Microbial Experimental Evolution – a proving ground for evolutionary theory and a tool for discovery. <i>EMBO Reports</i> , 2019, 20, e46992.	5.1	116
13	Diverse hydrogen production and consumption pathways influence methane production in ruminants. <i>ISME Journal</i> , 2019, 13, 2617-2632.	10.0	151
14	Fitness cost of <i>mcr-1</i> -mediated polymyxin resistance in <i>Klebsiella pneumoniae</i> . <i>Journal of Antimicrobial Chemotherapy</i> , 2018, 73, 1604-1610.	3.2	72
15	Adaptive evolution of genomically recoded <i>Escherichia coli</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 3090-3095.	7.6	79
16	Beneficial Mutations from Evolution Experiments Increase Rates of Growth and Fermentation. <i>Journal of Molecular Evolution</i> , 2018, 86, 111-117.	1.9	6
17	The dynamics of molecular evolution over 60,000 generations. <i>Nature</i> , 2017, 551, 45-50.	36.2	624
18	Coevolution with bacteria drives the evolution of aerobic fermentation in <i>Lachancea kluyveri</i> . <i>PLoS ONE</i> , 2017, 12, e0173318.	2.5	25

#	ARTICLE	IF	CITATIONS
19	Mutation at a distance caused by homopolymeric guanine repeats in <i>Saccharomyces cerevisiae</i> . Science Advances, 2016, 2, e1501033.	10.9	9
20	Sex speeds adaptation by altering the dynamics of molecular evolution. Nature, 2016, 531, 233-236.	36.2	316
21	Crowded growth leads to the spontaneous evolution of semistable coexistence in laboratory yeast populations. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 11306-11311.	7.6	48
22	The evolutionary dynamics of tRNA-gene copy number and codon-use in E. coli. BMC Evolutionary Biology, 2015, 15, 163.	3.1	26
23	The Evolution of Low Mutation Rates in Experimental Mutator Populations of <i>Saccharomyces cerevisiae</i> . Current Biology, 2012, 22, 1235-1240.	4.0	50
24	The distribution of fitness effects of new beneficial mutations in <i>Pseudomonas fluorescens</i> . Biology Letters, 2011, 7, 98-100.	2.4	48
25	Clusters of Nucleotide Substitutions and Insertion/Deletion Mutations Are Associated with Repeat Sequences. PLoS Biology, 2011, 9, e1000622.	5.4	107
26	Adaptive Divergence in Experimental Populations of <i>Pseudomonas fluorescens</i> . IV. Genetic Constraints Guide Evolutionary Trajectories in a Parallel Adaptive Radiation. Genetics, 2009, 183, 1041-1053.	2.9	140
27	The evolutionary mechanism of non-carbapenemase carbapenem-resistant phenotypes in <i>Klebsiella</i> spp. ELife, 0, 12, .	5.9	2
28	Evolutionary shift of a tipping point can precipitate, or forestall, collapse in a microbial community. Nature Ecology and Evolution, 0, , .	8.0	0