

# Charles F Baer

## List of Publications by Year in descending order

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36  
papers

1,723  
citations

430874

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361022

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74  
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docs citations

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times ranked

1800  
citing authors

#	ARTICLE	IF	CITATIONS
1	Mutation rate variation in multicellular eukaryotes: causes and consequences. <i>Nature Reviews Genetics</i> , 2007, 8, 619-631.	16.3	389
2	A genome-wide view of <i>Caenorhabditis elegans</i> base-substitution mutation processes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 16310-16314.	7.1	251
3	Comparative evolutionary genetics of spontaneous mutations affecting fitness in rhabditid nematodes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 5785-5790.	7.1	147
4	Variation in Base-Substitution Mutation in Experimental and Natural Lineages of <i>Caenorhabditis Nematodes</i> . <i>Genome Biology and Evolution</i> , 2012, 4, 513-522.	2.5	114
5	Experimental Evolution with <i>Caenorhabditis</i> Nematodes. <i>Genetics</i> , 2017, 206, 691-716.	2.9	94
6	Scaling, Selection, and Evolutionary Dynamics of the Mitotic Spindle. <i>Current Biology</i> , 2015, 25, 732-740.	3.9	73
7	Bias and Evolution of the Mutationally Accessible Phenotypic Space in a Developmental System. <i>PLoS Genetics</i> , 2010, 6, e1000877.	3.5	63
8	Temperature, stress and spontaneous mutation in <i>Caenorhabditis briggsae</i> and <i>Caenorhabditis elegans</i> . <i>Biology Letters</i> , 2013, 9, 20120334.	2.3	61
9	Cumulative Effects of Spontaneous Mutations for Fitness in <i>Caenorhabditis</i> : Role of Genotype, Environment and Stress. <i>Genetics</i> , 2006, 174, 1387-1395.	2.9	49
10	Does Mutation Rate Depend on Itself. <i>PLoS Biology</i> , 2008, 6, e52.	5.6	49
11	Evolution of the Mutational Process under Relaxed Selection in <i>Caenorhabditis elegans</i> . <i>Molecular Biology and Evolution</i> , 2019, 36, 239-251.	8.9	46
12	Quantifying the Decanalizing Effects of Spontaneous Mutations in Rhabditid Nematodes. <i>American Naturalist</i> , 2008, 172, 272-281.	2.1	36
13	Mutational Bias for Body Size in Rhabditid Nematodes. <i>Genetics</i> , 2007, 176, 1653-1661.	2.9	35
14	No Evidence of Elevated Germline Mutation Accumulation Under Oxidative Stress in <i>Caenorhabditis elegans</i> . <i>Genetics</i> , 2011, 189, 1439-1447.	2.9	32
15	Spontaneous Mutational and Standing Genetic (Co)variation at Dinucleotide Microsatellites in <i>Caenorhabditis briggsae</i> and <i>Caenorhabditis elegans</i> . <i>Molecular Biology and Evolution</i> , 2008, 26, 659-669.	8.9	31
16	The mutational structure of metabolism in <i>Caenorhabditis elegans</i> . <i>Evolution; International Journal of Organic Evolution</i> , 2016, 70, 2239-2246.	2.3	30
17	Mutation Is a Sufficient and Robust Predictor of Genetic Variation for Mitotic Spindle Traits in <i>Caenorhabditis elegans</i> . <i>Genetics</i> , 2016, 203, 1859-1870.	2.9	25
18	Mutability of mononucleotide repeats, not oxidative stress, explains the discrepancy between laboratory-accumulated mutations and the natural allele-frequency spectrum in <i>C. elegans</i> . <i>Genome Research</i> , 2021, 31, 1602-1613.	5.5	24

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19	Correlated evolution of life-history with size at maturity in <i>Daphnia pulicaria</i> : patterns within and between populations. <i>Genetical Research</i> , 2003, 81, 123-132.	0.9	21
20	Considerations when choosing a genetic model organism for metabolomics studies. <i>Current Opinion in Chemical Biology</i> , 2017, 36, 7-14.	6.1	21
21	Comparing Mutational and Standing Genetic Variability for Fitness and Size in <i>Caenorhabditis briggsae</i> and <i>C. elegans</i> . <i>Genetics</i> , 2009, 183, 685-692.	2.9	18
22	RAPID DECLINE IN FITNESS OF MUTATION ACCUMULATION LINES OF GONOCHORISTIC (OUTCROSSING) CAENORHABDITIS NEMATODES. <i>Evolution; International Journal of Organic Evolution</i> , 2010, 64, 3242-3253.	2.3	15
23	Genetic (Co)Variation for Life Span in Rhabditid Nematodes: Role of Mutation, Selection, and History. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2009, 64A, 1134-1145.	3.6	12
24	The mutational decay of male-male and hermaphrodite-hermaphrodite competitive fitness in the androdioecious nematode <i>C. elegans</i> . <i>Heredity</i> , 2018, 120, 1-12.	2.6	11
25	Invariance (?) of Mutational Parameters for Relative Fitness Over 400 Generations of Mutation Accumulation in <i>Caenorhabditis elegans</i> . <i>G3: Genes, Genomes, Genetics</i> , 2012, 2, 1497-1503.	1.8	9
26	The distribution of mutational effects on fitness in <i>Caenorhabditis elegans</i> inferred from standing genetic variation. <i>Genetics</i> , 2022, 220, .	2.9	9
27	Evolution of a Higher Intracellular Oxidizing Environment in <i>Caenorhabditis elegans</i> under Relaxed Selection. <i>PLoS ONE</i> , 2013, 8, e65604.	2.5	7
28	The red death meets the abdominal bristle: Polygenic mutation for susceptibility to a bacterial pathogen in <i>Caenorhabditis elegans</i> . <i>Evolution; International Journal of Organic Evolution</i> , 2015, 69, 508-519.	2.3	6
29	Head-to-head comparison of three experimental methods of quantifying competitive fitness in <i>C. elegans</i> . <i>PLoS ONE</i> , 2018, 13, e0201507.	2.5	5
30	Network Architecture and Mutational Sensitivity of the <i>C. elegans</i> Metabolome. <i>Frontiers in Molecular Biosciences</i> , 2018, 5, 69.	3.5	4
31	Mutation, selection, and the prevalence of the <i>Caenorhabditis elegans</i> heat-sensitive mortal germline phenotype. <i>G3: Genes, Genomes, Genetics</i> , 2022, 12, .	1.8	4
32	Spontaneous Mutations Decrease Sensitivity of Gene Expression to Random Environmental Variation in <i>Caenorhabditis elegans</i> . <i>PLoS ONE</i> , 2010, 5, e8750.	2.5	3
33	Evolution: Environmental Dependence of the Mutational Process. <i>Current Biology</i> , 2019, 29, R415-R417.	3.9	3
34	Short-term heritable variation overwhelms 200 generations of mutational variance for metabolic traits in <i>Caenorhabditis elegans</i> . <i>Evolution; International Journal of Organic Evolution</i> , 2020, 74, 2451-2464.	2.3	3
35	Reverse Plasticity Underlies Rapid Evolution by Clonal Selection within Populations of Fibroblasts Propagated on a Novel Soft Substrate. <i>Molecular Biology and Evolution</i> , 2021, 38, 3279-3293.	8.9	2
36	Reply to: Mutation rate variation in eukaryotes: evolutionary implications of site-specific mechanisms. <i>Nature Reviews Genetics</i> , 2007, 8, 902-902.	16.3	0