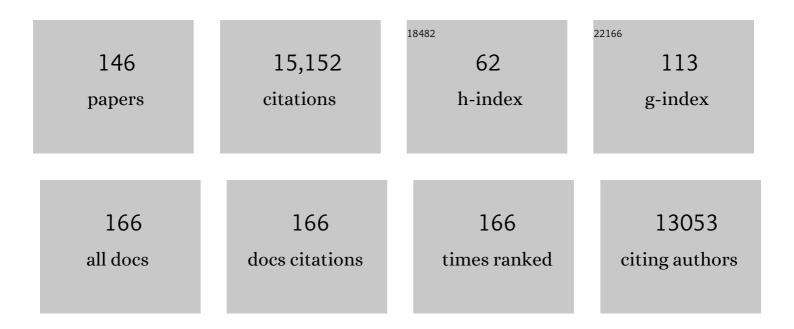
## Adam C Eyre-Walker

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	The distribution of fitness effects of new mutations. Nature Reviews Genetics, 2007, 8, 610-618.	16.3	1,234
2	Adaptive protein evolution in Drosophila. Nature, 2002, 415, 1022-1024.	27.8	632
3	Variation in the mutation rate across mammalian genomes. Nature Reviews Genetics, 2011, 12, 756-766.	16.3	438
4	Estimating the Rate of Adaptive Molecular Evolution in the Presence of Slightly Deleterious Mutations and Population Size Change. Molecular Biology and Evolution, 2009, 26, 2097-2108.	8.9	413
5	High genomic deleterious mutation rates in hominids. Nature, 1999, 397, 344-347.	27.8	412
6	The evolution of isochores. Nature Reviews Genetics, 2001, 2, 549-555.	16.3	379
7	The Distribution of Fitness Effects of New Deleterious Amino Acid Mutations in Humans. Genetics, 2006, 173, 891-900.	2.9	360
8	Investigation of the bottleneck leading to the domestication of maize. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 4441-4446.	7.1	359
9	Evidence of Selection upon Genomic GC-Content in Bacteria. PLoS Genetics, 2010, 6, e1001107.	3.5	355
10	Population size and the rate of evolution. Trends in Ecology and Evolution, 2014, 29, 33-41.	8.7	346
11	Joint Inference of the Distribution of Fitness Effects of Deleterious Mutations and Population Demography Based on Nucleotide Polymorphism Frequencies. Genetics, 2007, 177, 2251-2261.	2.9	336
12	Synonymous Codon Usage in Escherichia coli: Selection for Translational Accuracy. Molecular Biology and Evolution, 2006, 24, 374-381.	8.9	290
13	The genomic rate of adaptive evolution. Trends in Ecology and Evolution, 2006, 21, 569-575.	8.7	271
14	Linkage Disequilibrium and Recombination in Hominid Mitochondrial DNA. Science, 1999, 286, 2524-2525.	12.6	270
15	Deleterious Mutations and the Evolution of Sex. Science, 2000, 290, 331-333.	12.6	249
16	Genome Wide Analyses Reveal Little Evidence for Adaptive Evolution in Many Plant Species. Molecular Biology and Evolution, 2010, 27, 1822-1832.	8.9	227
17	Estimation of the Neutrality Index. Molecular Biology and Evolution, 2011, 28, 63-70.	8.9	224
18	Direct Measure of the De Novo Mutation Rate in Autism and Schizophrenia Cohorts. American Journal of Human Genetics. 2010. 87. 316-324.	6.2	222

#	Article	IF	CITATIONS
19	Genetic architecture of a complex trait and its implications for fitness and genome-wide association studies. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 1752-1756.	7.1	222
20	Changing Effective Population Size and the McDonald-Kreitman Test. Genetics, 2002, 162, 2017-2024.	2.9	221
21	The Genomic Rate of Adaptive Amino Acid Substitution in Drosophila. Molecular Biology and Evolution, 2004, 21, 1350-1360.	8.9	214
22	Recombination and mammalian genome evolution. Proceedings of the Royal Society B: Biological Sciences, 1993, 252, 237-243.	2.6	211
23	Synonymous codon bias is related to gene length in Escherichia coli: selection for translational accuracy?. Molecular Biology and Evolution, 1996, 13, 864-872.	8.9	208
24	Translational selection and molecular evolution. Current Opinion in Genetics and Development, 1998, 8, 688-693.	3.3	194
25	Quantifying the Slightly Deleterious Mutation Model of Molecular Evolution. Molecular Biology and Evolution, 2002, 19, 2142-2149.	8.9	191
26	The Assessment of Science: The Relative Merits of Post-Publication Review, the Impact Factor, and the Number of Citations. PLoS Biology, 2013, 11, e1001675.	5.6	191
27	The distribution of bacterial doubling times in the wild. Proceedings of the Royal Society B: Biological Sciences, 2018, 285, 20180789.	2.6	182
28	A Broad Survey of Recombination in Animal Mitochondria. Molecular Biology and Evolution, 2004, 21, 2319-2325.	8.9	178
29	Evidence for Widespread Degradation of Gene Control Regions in Hominid Genomes. PLoS Biology, 2005, 3, e42.	5.6	178
30	Evidence of Selection on Silent Site Base Composition in Mammals: Potential Implications for the Evolution of Isochores and Junk DNA. Genetics, 1999, 152, 675-683.	2.9	177
31	The McDonald-Kreitman Test and Slightly Deleterious Mutations. Molecular Biology and Evolution, 2008, 25, 1007-1015.	8.9	167
32	Reduced synonymous substitution rate at the start of enterobacterial genes. Nucleic Acids Research, 1993, 21, 4599-4603.	14.5	165
33	The Effect of Variation in the Effective Population Size on the Rate of Adaptive Molecular Evolution in Eukaryotes. Genome Biology and Evolution, 2012, 4, 658-667.	2.5	156
34	Terumi Mukai and the Riddle of Deleterious Mutation Rates. Genetics, 1999, 153, 515-523.	2.9	154
35	Rates of Lateral Gene Transfer in Prokaryotes: High but Why?. Trends in Microbiology, 2015, 23, 598-605.	7.7	153
36	How clonal are human mitochondria?. Proceedings of the Royal Society B: Biological Sciences, 1999, 266, 477-483.	2.6	152

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37	The Rate of Adaptive Evolution in Enteric Bacteria. Molecular Biology and Evolution, 2006, 23, 1348-1356.	8.9	146
38	Hundreds of putatively functional small open reading frames in Drosophila. Genome Biology, 2011, 12, R118.	9.6	143
39	Evidence for Pervasive Adaptive Protein Evolution in Wild Mice. PLoS Genetics, 2010, 6, e1000825.	3.5	123
40	A Method for Inferring the Rate of Occurrence and Fitness Effects of Advantageous Mutations. Genetics, 2011, 189, 1427-1437.	2.9	111
41	Problems with Parsimony in Sequences of Biased Base Composition. Journal of Molecular Evolution, 1998, 47, 686-690.	1.8	110
42	The rate of adaptive evolution in animal mitochondria. Molecular Ecology, 2016, 25, 67-78.	3.9	109
43	Evidence for Variation in the Effective Population Size of Animal Mitochondrial DNA. PLoS ONE, 2009, 4, e4396.	2.5	108
44	Correlated rates of synonymous site evolution across plant genomes. Molecular Biology and Evolution, 1997, 14, 455-460.	8.9	106
45	An analysis of codon usage in mammals: Selection or mutation bias?. Journal of Molecular Evolution, 1991, 33, 442-449.	1.8	105
46	Cryptic Variation in the Human Mutation Rate. PLoS Biology, 2009, 7, e1000027.	5.6	101
47	Patterns of Evolutionary Constraints in Intronic and Intergenic DNA of Drosophila. Genome Research, 2004, 14, 273-279.	5.5	99
48	Human disease genes: patterns and predictions. Gene, 2003, 318, 169-175.	2.2	97
49	Quantifying the Variation in the Effective Population Size Within a Genome. Genetics, 2011, 189, 1389-1402.	2.9	91
50	An improved genome of the model marine alga Ostreococcus tauri unfolds by assessing Illumina de novo assemblies. BMC Genomics, 2014, 15, 1103.	2.8	90
51	Questioning Evidence for Recombination in Human Mitochondrial DNA. Science, 2000, 288, 1931-1931.	12.6	88
52	A new perspective on isochore evolution. Gene, 2006, 385, 71-74.	2.2	88
53	What can we learn about the distribution of fitness effects of new mutations from DNA sequence data?. Philosophical Transactions of the Royal Society B: Biological Sciences, 2010, 365, 1187-1193.	4.0	88
54	Estimating the distribution of fitness effects from DNA sequence data: Implications for the molecular clock. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 10335-10340.	7.1	83

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55	Synonymous Codon Bias Is Not Caused by Mutation Bias in G+C-Rich Genes in Humans. Molecular Biology and Evolution, 2001, 18, 982-986.	8.9	79
56	Synonymous substitution rates in enterobacteria Genetics, 1995, 140, 1407-1412.	2.9	79
57	The other side of the nearly neutral theory, evidence of slightly advantageous back-mutations. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 16992-16997.	7.1	77
58	The large-scale distribution of somatic mutations in cancer genomes. Human Mutation, 2012, 33, 136-143.	2.5	77
59	Adaptive Evolution Is Substantially Impeded by Hill–Robertson Interference in <i>Drosophila</i> . Molecular Biology and Evolution, 2016, 33, 442-455.	8.9	77
60	The evolution of courtship behaviors through the origination of a new gene in <i>Drosophila</i> . Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 7478-7483.	7.1	76
61	Human Triallelic Sites: Evidence for a New Mutational Mechanism?. Genetics, 2010, 184, 233-241.	2.9	76
62	The Problem of Counting Sites in the Estimation of the Synonymous and Nonsynonymous Substitution Rates: Implications for the Correlation Between the Synonymous Substitution Rate and Codon Usage Bias. Genetics, 2003, 165, 1587-1597.	2.9	75
63	Divergence and Polymorphism Under the Nearly Neutral Theory of Molecular Evolution. Journal of Molecular Evolution, 2008, 67, 418-426.	1.8	74
64	Population genomics of picophytoplankton unveils novel chromosome hypervariability. Science Advances, 2017, 3, e1700239.	10.3	73
65	Large scale variation in the rate of germ-line de novo mutation, base composition, divergence and diversity in humans. PLoS Genetics, 2018, 14, e1007254.	3.5	73
66	Does Human mtDNA Recombine?. Journal of Molecular Evolution, 2001, 53, 430-435.	1.8	67
67	Mutation pressure, natural selection, and the evolution of base composition in Drosophila. Genetica, 1998, 102/103, 49-60.	1.1	65
68	Mitochondrial Replacement Therapy: Are Mito-nuclear Interactions Likely To Be a Problem?. Genetics, 2017, 205, 1365-1372.	2.9	65
69	Spontaneous Mutation Rate in the Smallest Photosynthetic Eukaryotes. Molecular Biology and Evolution, 2017, 34, 1770-1779.	8.9	65
70	The Decline of Isochores in Mammals: An Assessment of the GC ContentVariation Along the Mammalian Phylogeny. Journal of Molecular Evolution, 2004, 58, 653-660.	1.8	63
71	Mitochondrial Steve: paternal inheritance of mitochondria in humans. Trends in Ecology and Evolution, 2003, 18, 2-4.	8.7	62
72	How and Why DNA Barcodes Underestimate the Diversity of Microbial Eukaryotes. PLoS ONE, 2011, 6, e16342.	2.5	62

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73	Recommendations for improving statistical inference in population genomics. PLoS Biology, 2022, 20, e3001669.	5.6	60
74	Are pangenomes adaptive or not?. Nature Microbiology, 2017, 2, 1576-1576.	13.3	59
75	The Evolution of Isochores: Evidence From SNP Frequency Distributions. Genetics, 2002, 162, 1805-1810.	2.9	56
76	Differentiating Between Selection and Mutation Bias. Genetics, 1997, 147, 1983-1987.	2.9	55
77	An investigation of the variation in the transition bias among various animal mitochondrial DNA. Gene, 2005, 355, 58-66.	2.2	53
78	A Problem With the Correlation Coefficient as a Measure of Gene Expression Divergence. Genetics, 2009, 183, 1597-1600.	2.9	53
79	A Resolution of the Mutation Load Paradox in Humans. Genetics, 2012, 191, 1321-1330.	2.9	50
80	A reanalysis of the indirect evidence for recombination in human mitochondrial DNA. Heredity, 2004, 92, 282-288.	2.6	48
81	Evidence that both G + C rich and G + C poor isochores are replicated early and late in the cell cycle. Nucleic Acids Research, 1992, 20, 1497-1501.	14.5	41
82	The close proximity ofEscherichia coli genes: Consequences for stop codon and synonymous codon use. Journal of Molecular Evolution, 1996, 42, 73-78.	1.8	41
83	Research groups: How big should they be?. PeerJ, 2015, 3, e989.	2.0	41
84	The muddle about mutations. Nature, 1997, 387, 135-136.	27.8	39
85	Do mitochondria recombine in humans?. Philosophical Transactions of the Royal Society B: Biological Sciences, 2000, 355, 1573-1580.	4.0	39
86	The Positive Correlation between dN/dS and dS in Mammals Is Due to Runs of Adjacent Substitutions. Molecular Biology and Evolution, 2011, 28, 1371-1380.	8.9	38
87	The Correlation Between Linkage Disequilibrium and Distance: Implications for Recombination in Hominid Mitochondria. Molecular Biology and Evolution, 2001, 18, 2132-2135.	8.9	36
88	Transposable Elements: Insertion Pattern and Impact on Gene Expression Evolution in Hominids. Molecular Biology and Evolution, 2010, 27, 1955-1962.	8.9	36
89	Estimating the Rate of Adaptive Molecular Evolution When the Evolutionary Divergence Between Species is Small. Journal of Molecular Evolution, 2012, 74, 61-68.	1.8	34
90	Analysis of the Phylogenetic Distribution of Isochores in Vertebrates and a Test of the Thermal Stability Hypothesis. Journal of Molecular Evolution, 2002, 55, 356-363.	1.8	33

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91	Partitioning the Variation in Mammalian Substitution Rates. Molecular Biology and Evolution, 2003, 20, 10-17.	8.9	33
92	Variation in synonymous codon use and DNA polymorphism within the Drosophila genome. Journal of Evolutionary Biology, 2006, 19, 1-11.	1.7	33
93	Molecular Evolutionary Consequences of Island Colonization. Genome Biology and Evolution, 2016, 8, 1876-1888.	2.5	33
94	The Effect of Transposable Element Insertions on Gene Expression Evolution in Rodents. PLoS ONE, 2009, 4, e4321.	2.5	32
95	Nearly Neutral Evolution across the Drosophila melanogaster Genome. Molecular Biology and Evolution, 2018, 35, 2685-2694.	8.9	32
96	Patterns of Base Composition Within the Genes of Drosophila melanogaster. Journal of Molecular Evolution, 1998, 46, 534-541.	1.8	31
97	The Accumulation of Gene Regulation Through Time. Genome Biology and Evolution, 2011, 3, 667-673.	2.5	31
98	Investigating Evolutionary Rate Variation in Bacteria. Journal of Molecular Evolution, 2019, 87, 317-326.	1.8	31
99	DNA mismatch repair and synonymous codon evolution in mammals Molecular Biology and Evolution, 1994, 11, 88-98.	8.9	29
100	DNA sequence diversity and the efficiency of natural selection in animal mitochondrial DNA. Heredity, 2017, 118, 88-95.	2.6	28
101	On the prospect of achieving accurate joint estimation of selection with population history. Genome Biology and Evolution, 2022, 14, .	2.5	28
102	Why Are Translationally Sub-Optimal Synonymous Codons Used in Escherichia coli?. Journal of Molecular Evolution, 2001, 53, 225-236.	1.8	25
103	The Genomic Distribution and Local Context of Coincident SNPs in Human and Chimpanzee. Genome Biology and Evolution, 2010, 2, 547-557.	2.5	25
104	Reply to Macaulay et al. (1999): mitochondrial DNA recombination-reasons to panic. Proceedings of the Royal Society B: Biological Sciences, 1999, 266, 2041-2042.	2.6	20
105	The Compositional Evolution of the Murid Genome. Journal of Molecular Evolution, 2002, 55, 197-201.	1.8	20
106	Evolutionary genetics: Direct evidence of recombination in human mitochondrial DNA. Heredity, 2004, 93, 321-321.	2.6	20
107	Organellar Inheritance in the Green Lineage: Insights from Ostreococcus tauri. Genome Biology and Evolution, 2013, 5, 1503-1511.	2.5	20
108	The comparative population genetics of <i>Neisseria meningitidis</i> and <i>Neisseria gonorrhoeae</i> . PeerJ, 2019, 7, e7216.	2.0	20

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109	The distance between Escherichia coli genes is related to gene expression levels. Journal of Bacteriology, 1995, 177, 5368-5369.	2.2	18
110	Fluctuating Selection Models and Mcdonald-Kreitman Type Analyses. PLoS ONE, 2014, 9, e84540.	2.5	18
111	How Much of the Variation in the Mutation Rate Along the Human Genome Can Be Explained?. G3: Genes, Genomes, Genetics, 2014, 4, 1667-1670.	1.8	18
112	Impact of Mutation Rate and Selection at Linked Sites on DNA Variation across the Genomes of Humans and Other Homininae. Genome Biology and Evolution, 2020, 12, 3550-3561.	2.5	18
113	Extensive Variation in the Mutation Rate Between and Within Human Genes Associated with Mendelian Disease. Human Mutation, 2016, 37, 488-494.	2.5	17
114	Nucleotide Substitution Rate Estimation in Enterobacteria: Approximate and Maximum-Likelihood Methods Lead to Similar Conclusions. Molecular Biology and Evolution, 2001, 18, 2124-2126.	8.9	15
115	The Excess of Small Inverted Repeats in Prokaryotes. Journal of Molecular Evolution, 2008, 67, 291-300.	1.8	15
116	A Selection Index for Gene Expression Evolution and Its Application to the Divergence between Humans and Chimpanzees. PLoS ONE, 2012, 7, e34935.	2.5	15
117	EVOLUTION: Enhanced: Size Does Not Matter for Mitochondrial DNA. Science, 2006, 312, 537-538.	12.6	14
118	Does Adaptive Protein Evolution Proceed by Large or Small Steps at the Amino Acid Level?. Molecular Biology and Evolution, 2019, 36, 990-998.	8.9	14
119	Fitness Effects of Spontaneous Mutations in Picoeukaryotic Marine Green Algae. G3: Genes, Genomes, Genetics, 2016, 6, 2063-2071.	1.8	13
120	Mitochondrial DNA Sequence Diversity in Mammals: A Correlation between the Effective and Census Population Sizes. Genome Biology and Evolution, 2020, 12, 2441-2449.	2.5	13
121	Response to Kondrashov. Trends in Genetics, 2001, 17, 77-78.	6.7	11
122	A Dissection of Volatility in Yeast. Molecular Biology and Evolution, 2005, 22, 2022-2026.	8.9	10
123	The role of DNA replication and isochores in generating mutation and silent substitution rate variance in mammals. Genetical Research, 1992, 60, 61-67.	0.9	9
124	Why Are Young and Old Repetitive Elements Distributed Differently in the Human Genome?. Journal of Molecular Evolution, 2005, 60, 290-296.	1.8	9
125	ODoSE: A Webserver for Genome-Wide Calculation of Adaptive Divergence in Prokaryotes. PLoS ONE, 2013, 8, e62447.	2.5	9
126	The Role of Mutation Rate Variation and Genetic Diversity in the Architecture of Human Disease. PLoS ONE, 2014, 9, e90166.	2.5	9

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127	The effect of constraint on the rate of evolution in neutral models with biased mutation Genetics, 1992, 131, 233-234.	2.9	8
128	Mutation pressure, natural selection, and the evolution of base composition in Drosophila. Contemporary Issues in Genetics and Evolution, 1998, , 49-60.	0.9	7
129	Synonymous substitutions are clustered in enterobacterial genes. Journal of Molecular Evolution, 1994, 39, 448-51.	1.8	6
130	Evolutionary genomics: reading the bands. BioEssays, 2000, 22, 105-107.	2.5	6
131	Understanding the Degradation of Hominid Gene Control. PLoS Computational Biology, 2006, 2, e19.	3.2	6
132	The outstanding scientist, R.A. Fisher: his views on eugenics and race. Heredity, 2021, 126, 565-576.	2.6	6
133	Are sites with multiple single nucleotide variants in cancer genomes a consequence of drivers, hypermutable sites or sequencing errors?. PeerJ, 2016, 4, e2391.	2.0	6
134	A Test of Whether Selection Maintains Isochores Using Sites Polymorphic for Alu and L1 Element Insertions. Genetics, 2002, 160, 815-817.	2.9	6
135	Searching for Sequence Directed Mutagenesis in Eukaryotes. Journal of Molecular Evolution, 2007, 64, 1-3.	1.8	5
136	A new test suggests hundreds of amino acid polymorphisms in humans are subject to balancing selection. PLoS Biology, 2022, 20, e3001645.	5.6	5
137	Does very short patch (VSP) repair efficiency vary in relation to gene expression levels?. Journal of Molecular Evolution, 1995, 40, 705-706.	1.8	4
138	A Test of Amino Acid Reversibility. Journal of Molecular Evolution, 2001, 52, 467-469.	1.8	3
139	Mitochondrial replacement and its effects on human health. Human Reproduction Update, 2019, 25, 392-394.	10.8	3
140	Changing Population Size in McDonald–Kreitman Style Analyses: Artifactual Correlations and Adaptive Evolution between Humans and Chimpanzees. Genome Biology and Evolution, 2022, 14, .	2.5	3
141	Patterns of selection in the evolution of a transposable element. G3: Genes, Genomes, Genetics, 2022, 12, .	1.8	3
142	Evolutionary genomics. Trends in Ecology and Evolution, 1999, 14, 176.	8.7	2
143	Signatures of selection on mitonuclear integrated genes uncover hidden mitogenomic variation in fur seals. Genome Biology and Evolution, 0, , .	2.5	2
144	Editorial. Genome Biology and Evolution, 2022, 14, .	2.5	1

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#	Article	IF	CITATIONS
145	Editorial. Genome Biology and Evolution, 2019, 11, 1958-1958.	2.5	Ο
146	Factors That Affect the Rates of Adaptive and Nonadaptive Evolution at the Gene Level in Humans and Chimpanzees. Genome Biology and Evolution, 2022, 14, .	2.5	0