Daniel L Hartl

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16,142 123 202 73 h-index g-index citations papers 6.59 18,351 211 9.9 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
202	Darwinian evolution can follow only very few mutational paths to fitter proteins. <i>Science</i> , 2006 , 312, 111-4	33.3	964
201	A genome-wide view of the spectrum of spontaneous mutations in yeast. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 9272-7	11.5	511
200	Sex-dependent gene expression and evolution of the Drosophila transcriptome. <i>Science</i> , 2003 , 300, 17	42, 	503
199	Evolutionary paths to antibiotic resistance under dynamically sustained drug selection. <i>Nature Genetics</i> , 2011 , 44, 101-5	36.3	496
198	Missense meanderings in sequence space: a biophysical view of protein evolution. <i>Nature Reviews Genetics</i> , 2005 , 6, 678-87	30.1	490
197	Selection for short introns in highly expressed genes. <i>Nature Genetics</i> , 2002 , 31, 415-8	36.3	390
196	High intrinsic rate of DNA loss in Drosophila. <i>Nature</i> , 1996 , 384, 346-9	50.4	322
195	Evidence for DNA loss as a determinant of genome size. <i>Science</i> , 2000 , 287, 1060-2	33.3	280
194	A genome-wide map of diversity in Plasmodium falciparum. <i>Nature Genetics</i> , 2007 , 39, 113-9	36.3	265
193	Genetic properties influencing the evolvability of gene expression. <i>Science</i> , 2007 , 317, 118-21	33.3	251
192	The cost of inbreeding in Arabidopsis. <i>Nature</i> , 2002 , 416, 531-4	50.4	251
191	Rapid evolution of male-biased gene expression in Drosophila. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003 , 100, 9894-9	11.5	245
190	Selective sweep of a newly evolved sperm-specific gene in Drosophila. <i>Nature</i> , 1998 , 396, 572-5	50.4	229
189	Evolution of proteins and gene expression levels are coupled in Drosophila and are independently associated with mRNA abundance, protein length, and number of protein-protein interactions. <i>Molecular Biology and Evolution</i> , 2005 , 22, 1345-54	8.3	208
188	Modern thoughts on an ancyent marinere: function, evolution, regulation. <i>Annual Review of Genetics</i> , 1997 , 31, 337-58	14.5	203
187	Misfolded proteins impose a dosage-dependent fitness cost and trigger a cytosolic unfolded protein response in yeast. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, 680-5	11.5	202
186	Accelerated evolution of resistance in multidrug environments. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 13977-81	11.5	199

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185	Stepwise acquisition of pyrimethamine resistance in the malaria parasite. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 12025-30	11.5	197
184	Limits of adaptation: the evolution of selective neutrality. <i>Genetics</i> , 1985 , 111, 655-74	4	194
183	Natural selection constrains neutral diversity across a wide range of species. <i>PLoS Biology</i> , 2015 , 13, e1	06)2/112	2 187
182	Metabolic flux and fitness. <i>Genetics</i> , 1987 , 115, 25-31	4	181
181	A single mode of canalization. <i>Trends in Ecology and Evolution</i> , 2002 , 17, 468-473	10.9	180
180	Polymorphic Y chromosomes harbor cryptic variation with manifold functional consequences. <i>Science</i> , 2008 , 319, 91-3	33.3	178
179	Epigenetic memory at malaria virulence genes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007 , 104, 899-902	11.5	178
178	An equivalence principle for the incorporation of favorable mutations in asexual populations. <i>Science</i> , 2006 , 311, 1615-7	33.3	177
177	Population genetic variation in genome-wide gene expression. <i>Molecular Biology and Evolution</i> , 2003 , 20, 955-63	8.3	171
176	Chromosomal regions specific to pathogenic isolates of Escherichia coli have a phylogenetically clustered distribution. <i>Journal of Bacteriology</i> , 1998 , 180, 1159-65	3.5	158
175	Evidence for S. cerevisiae fermentation in ancient wine. <i>Journal of Molecular Evolution</i> , 2003 , 57 Suppl 1, S226-32	3.1	152
174	Recent origin of Plasmodium falciparum from a single progenitor. <i>Science</i> , 2001 , 293, 482-4	33.3	152
173	Compensatory cis-trans evolution and the dysregulation of gene expression in interspecific hybrids of Drosophila. <i>Genetics</i> , 2005 , 171, 1813-22	4	151
172	Genetic diversity in yeast assessed with whole-genome oligonucleotide arrays. <i>Genetics</i> , 2003 , 163, 79-8	894	148
171	Selective neutrality of 6PGD allozymes in E. coli and the effects of genetic background. <i>Genetics</i> , 1980 , 96, 801-17	4	145
170	Epigenetic effects of polymorphic Y chromosomes modulate chromatin components, immune response, and sexual conflict. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 15826-31	11.5	144
169	Transgene Coplacement and high efficiency site-specific recombination with the Cre/loxP system in Drosophila. <i>Genetics</i> , 1996 , 144, 715-26	4	144
168	Directional selection and the site-frequency spectrum. <i>Genetics</i> , 2001 , 159, 1779-88	4	139

167	Genetic incompatibilities are widespread within species. <i>Nature</i> , 2013 , 504, 135-7	50.4	136
166	Evidence for interspecific transfer of the transposable element mariner between Drosophila and Zaprionus. <i>Journal of Molecular Evolution</i> , 1991 , 33, 514-24	3.1	133
165	Bayesian analysis of gene expression levels: statistical quantification of relative mRNA level across multiple strains or treatments. <i>Genome Biology</i> , 2002 , 3, RESEARCH0071	18.3	128
164	What restricts the activity of mariner-like transposable elements. <i>Trends in Genetics</i> , 1997 , 13, 197-201	8.5	127
163	Population genomics of inversion polymorphisms in Drosophila melanogaster. <i>PLoS Genetics</i> , 2012 , 8, e1003056	6	121
162	Optimization of gene expression by natural selection. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 1133-8	11.5	118
161	A portrait of copy-number polymorphism in Drosophila melanogaster. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007 , 104, 19920-5	11.5	118
160	Anomalies in the expression profile of interspecific hybrids of Drosophila melanogaster and Drosophila simulans. <i>Genome Research</i> , 2004 , 14, 373-9	9.7	118
159	Prevalence of positive selection among nearly neutral amino acid replacements in Drosophila. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007 , 104, 6504-10	11.5	117
158	DNA-binding specificity changes in the evolution of forkhead transcription factors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 12349-54	11.5	116
157	Population structure and transmission dynamics of Plasmodium vivax in rural Amazonia. <i>Journal of Infectious Diseases</i> , 2007 , 195, 1218-26	7	116
156	Genetic dissection of hybrid incompatibilities between Drosophila simulans and D. mauritiana. I. Differential accumulation of hybrid male sterility effects on the X and autosomes. <i>Genetics</i> , 2003 , 164, 1383-97	4	116
155	Modeling malaria genomics reveals transmission decline and rebound in Senegal. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 7067-72	11.5	114
154	RATES OF DIVERGENCE IN GENE EXPRESSION PROFILES OF PRIMATES, MICE, AND FLIES: STABILIZING SELECTION AND VARIABILITY AMONG FUNCTIONAL CATEGORIES. <i>Evolution;</i> International Journal of Organic Evolution, 2005 , 59, 126-137	3.8	114
153	Population Dynamics of the Segregation Distorter Polymorphism of DROSOPHILA MELANOGASTER. <i>Genetics</i> , 1978 , 89, 171-92	4	114
152	Behavioral idiosyncrasy reveals genetic control of phenotypic variability. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 6706-11	11.5	113
151	Glycophorin B is the erythrocyte receptor of Plasmodium falciparum erythrocyte-binding ligand, EBL-1. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 5348-	·5 ¹ 2 ^{1.5}	113
150	A sex-ratio meiotic drive system in Drosophila simulans. II: an X-linked distorter. <i>PLoS Biology</i> , 2007 , 5, e293	9.7	113

149	Distribution and abundance of insertion sequences among natural isolates of Escherichia coli. <i>Genetics</i> , 1987 , 115, 51-63	4	112
148	A sex-ratio meiotic drive system in Drosophila simulans. I: an autosomal suppressor. <i>PLoS Biology</i> , 2007 , 5, e292	9.7	111
147	Compensatory nearly neutral mutations: selection without adaptation. <i>Journal of Theoretical Biology</i> , 1996 , 182, 303-9	2.3	111
146	cis-Regulatory and protein evolution in orthologous and duplicate genes. <i>Genome Research</i> , 2004 , 14, 1530-6	9.7	106
145	Dominance and the evolutionary accumulation of cis- and trans-effects on gene expression. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 14471-6	11.5	104
144	Bayesian analysis suggests that most amino acid replacements in Drosophila are driven by positive selection. <i>Journal of Molecular Evolution</i> , 2003 , 57 Suppl 1, S154-64	3.1	104
143	Mosaic structure of plasmids from natural populations of Escherichia coli. <i>Genetics</i> , 1996 , 143, 1091-100	04	101
142	Genomic gigantism: DNA loss is slow in mountain grasshoppers. <i>Molecular Biology and Evolution</i> , 2001 , 18, 246-53	8.3	100
141	Extensive microsatellite diversity in the human malaria parasite Plasmodium vivax. <i>Gene</i> , 2008 , 410, 105	5-3.8	96
140	Colloquium papers: Adaptive landscapes and protein evolution. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107 Suppl 1, 1747-51	11.5	94
139	Effects of X-linkage and sex-biased gene expression on the rate of adaptive protein evolution in Drosophila. <i>Molecular Biology and Evolution</i> , 2008 , 25, 1639-50	8.3	92
138	Genotypic Context and Epistasis in Individuals and Populations. <i>Cell</i> , 2016 , 166, 279-287	56.2	85
137	Biophysical principles predict fitness landscapes of drug resistance. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, E1470-8	11.5	83
136	Ecological and evolutionary genomics of Saccharomyces cerevisiae. <i>Molecular Ecology</i> , 2006 , 15, 575-91	5.7	83
135	The origin of malaria: mixed messages from genetic diversity. Nature Reviews Microbiology, 2004, 2, 15-	2 2 2.2	82
134	Geographic structure of Plasmodium vivax: microsatellite analysis of parasite populations from Sri Lanka, Myanmar, and Ethiopia. <i>American Journal of Tropical Medicine and Hygiene</i> , 2010 , 82, 235-42	3.2	81
133	Pathway Processor: a tool for integrating whole-genome expression results into metabolic networks. <i>Genome Research</i> , 2002 , 12, 1121-6	9.7	81
132	Fitness as a function of beta-galactosidase activity in Escherichia coli. <i>Genetical Research</i> , 1986 , 48, 1-8	1.1	77

131	Genetic dissection of hybrid incompatibilities between Drosophila simulans and D. mauritiana. III. Heterogeneous accumulation of hybrid incompatibilities, degree of dominance, and implications for Haldane's rule. <i>Evolution; International Journal of Organic Evolution</i> , 2003 , 57, 2580-98	3.8	76
130	Molecular melodies in high and low C. <i>Nature Reviews Genetics</i> , 2000 , 1, 145-9	30.1	74
129	Excess polymorphisms in genes for membrane proteins in Plasmodium falciparum. <i>Science</i> , 2002 , 298, 216-8	33.3	73
128	Compensatory mutations restore fitness during the evolution of dihydrofolate reductase. <i>Molecular Biology and Evolution</i> , 2010 , 27, 2682-90	8.3	72
127	Salmonella virulence plasmid. Modular acquisition of the spv virulence region by an F-plasmid in Salmonella enterica subspecies I and insertion into the chromosome of subspecies II, IIIa, IV and VII isolates. <i>Genetics</i> , 1998 , 149, 1183-90	4	72
126	Mutations in actin-binding protein coronin confer reduced artemisinin susceptibility. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 12799-12804	11.5	72
125	Genetic surveillance detects both clonal and epidemic transmission of malaria following enhanced intervention in Senegal. <i>PLoS ONE</i> , 2013 , 8, e60780	3.7	71
124	Patterns of insertion and deletion in contrasting chromatin domains. <i>Molecular Biology and Evolution</i> , 2002 , 19, 2211-25	8.3	69
123	Towards a theory of evolutionary adaptation. <i>Genetica</i> , 1998 , 102/103, 525-533	1.5	67
122	Evolution of transposons: natural selection for Tn5 in Escherichia coli K12. <i>Genetics</i> , 1983 , 103, 581-92	4	67
121	Genetic dissection of hybrid incompatibilities between Drosophila simulans and D. mauritiana. II. Mapping hybrid male sterility loci on the third chromosome. <i>Genetics</i> , 2003 , 164, 1399-418	4	66
120	GENETIC DISSECTION OF HYBRID INCOMPATIBILITIES BETWEEN DROSOPHILA SIMULANS AND D. MAURITIANA. III. HETEROGENEOUS ACCUMULATION OF HYBRID INCOMPATIBILITIES, DEGREE OF DOMINANCE, AND IMPLICATIONS FOR HALDANE'S RULE. <i>Evolution; International Journal of</i>	3.8	64
119	Trash DNA is what gets thrown away: high rate of DNA loss in Drosophila. <i>Gene</i> , 1997 , 205, 279-89	3.8	62
118	Cytoplasmic dynein intermediate-chain isoforms with different targeting properties created by tissue-specific alternative splicing. <i>Molecular and Cellular Biology</i> , 1998 , 18, 6816-25	4.8	60
117	Use of polymerase chain reaction to amplify segments outside boundaries of known sequences. <i>Methods in Enzymology</i> , 1993 , 218, 309-21	1.7	58
116	Clonal outbreak of Plasmodium falciparum infection in eastern Panama. <i>Journal of Infectious Diseases</i> , 2015 , 211, 1087-96	7	56
115	A maximum likelihood method for analyzing pseudogene evolution: implications for silent site evolution in humans and rodents. <i>Molecular Biology and Evolution</i> , 2002 , 19, 110-7	8.3	55
114	COIL: a methodology for evaluating malarial complexity of infection using likelihood from single nucleotide polymorphism data. <i>Malaria Journal</i> , 2015 , 14, 4	3.6	50

113	Functional effects of PGI allozymes in Escherichia coli. <i>Genetics</i> , 1983 , 105, 1-18	4	48
112	The roles of cis- and trans-regulation in the evolution of regulatory incompatibilities and sexually dimorphic gene expression. <i>Genome Research</i> , 2014 , 24, 84-95	9.7	47
111	Gene conversion as a source of nucleotide diversity in Plasmodium falciparum. <i>Molecular Biology and Evolution</i> , 2003 , 20, 726-34	8.3	47
110	Genomic sequencing of Plasmodium falciparum malaria parasites from Senegal reveals the demographic history of the population. <i>Molecular Biology and Evolution</i> , 2012 , 29, 3427-39	8.3	46
109	Harnessing evolutionary fitness in Plasmodium falciparum for drug discovery and suppressing resistance. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 799-804	11.5	45
108	Germline transformation of Drosophila virilis with the transposable element mariner. <i>Genetics</i> , 1996 , 143, 365-74	4	45
107	Subunit interactions in the mariner transposase. <i>Genetics</i> , 1996 , 144, 1087-95	4	45
106	Discovery of the transposable element mariner. <i>Genetics</i> , 2001 , 157, 471-6	4	45
105	Factors contributing to the hybrid dysgenesis syndrome in Drosophila virilis. <i>Genetical Research</i> , 1998 , 71, 109-17	1.1	44
104	Germline transformation of Drosophila virilis mediated by the transposable element hobo. <i>Genetics</i> , 1996 , 142, 173-7	4	43
103	Patterns of DNA sequence variation suggest the recent action of positive selection in the janus-ocnus region of Drosophila simulans. <i>Genetics</i> , 2001 , 159, 647-57	4	42
102	Duplication, gene conversion, and genetic diversity in the species-specific acyl-CoA synthetase gene family of Plasmodium falciparum. <i>Molecular and Biochemical Parasitology</i> , 2006 , 150, 10-24	1.9	40
101	Mutational reversions during adaptive protein evolution. Molecular Biology and Evolution, 2007, 24, 160	88.130	40
100	The paradoxical population genetics of Plasmodium falciparum. <i>Trends in Parasitology</i> , 2002 , 18, 266-72	6.4	40
99	Chromosomal effects of rapid gene evolution in Drosophila melanogaster. <i>Science</i> , 2001 , 291, 128-30	33.3	40
98	P1 clones from Drosophila melanogaster as markers to study the chromosomal evolution of Muller's A element in two species of the obscura group of Drosophila. <i>Chromosoma</i> , 1995 , 104, 129-36	2.8	40
97	Functional evidence that a recently evolved Drosophila sperm-specific gene boosts sperm competition. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 2043-8	11.5	39
96	Regulation of the transposable element mariner. <i>Genetica</i> , 1997 , 100, 177-184	1.5	38

95	Maximum likelihood and Bayesian methods for estimating the distribution of selective effects among classes of mutations using DNA polymorphism data. <i>Theoretical Population Biology</i> , 2003 , 63, 91-103	1.2	38
94	Inverse polymerase chain reaction. <i>Nature Biotechnology</i> , 1990 , 8, 759-60	44.5	38
93	A framework physical map of Drosophila virilis based on P1 clones: applications in genome evolution. <i>Chromosoma</i> , 1997 , 106, 99-107	2.8	37
92	Adaptive Landscape by Environment Interactions Dictate Evolutionary Dynamics in Models of Drug Resistance. <i>PLoS Computational Biology</i> , 2016 , 12, e1004710	5	37
91	Coupled instability of two X-linked genes in Drosophila mauritiana: germinal and somatic mutability. <i>Genetics</i> , 1985 , 111, 57-65	4	37
90	Molecular considerations in the evolution of bacterial genes. <i>Journal of Molecular Evolution</i> , 1991 , 33, 241-50	3.1	36
89	What can we learn from fitness landscapes?. Current Opinion in Microbiology, 2014, 21, 51-7	7.9	35
88	Reconstructing the ancient mariners of humans. <i>Nature Genetics</i> , 1996 , 12, 360-1	36.3	34
87	Distribution of transposable elements in prokaryotes. <i>Theoretical Population Biology</i> , 1986 , 30, 1-16	1.2	34
86	Mosquito Vectors and the Globalization of Plasmodium falciparum Malaria. <i>Annual Review of Genetics</i> , 2016 , 50, 447-465	14.5	33
85	Defective Histone Transition during Spermiogenesis in Heterozygous SEGREGATION DISTORTER Males of DROSOPHILA MELANOGASTER. <i>Genetics</i> , 1982 , 101, 57-69	4	32
84	Cascading transcriptional effects of a naturally occurring frameshift mutation in Saccharomyces cerevisiae. <i>Molecular Ecology</i> , 2008 , 17, 2985-97	5.7	31
83	Fitness trade-offs in the evolution of dihydrofolate reductase and drug resistance in Plasmodium falciparum. <i>PLoS ONE</i> , 2011 , 6, e19636	3.7	30
82	Diversifying selection governs sequence polymorphism in the major adhesin proteins fimA, papA, and sfaA of Escherichia coli. <i>Journal of Molecular Evolution</i> , 1998 , 47, 258-67	3.1	30
81	Genetic relatedness analysis reveals the cotransmission of genetically related Plasmodium falciparum parasites in ThiB, Senegal. <i>Genome Medicine</i> , 2017 , 9, 5	14.4	29
80	Origin and Evolution of a New Gene Expressed in the Drosophila Sperm Axoneme. <i>Genetica</i> , 2003 , 118, 233-244	1.5	29
79	Discordant rates of chromosome evolution in the Drosophila virilis species group. <i>Genetics</i> , 1997 , 147, 223-30	4	29
78	Insertion sites of the transposable element mariner are fixed in the genome of Drosophila sechellia. <i>Journal of Molecular Evolution</i> , 1991 , 33, 450-6	3.1	28

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77	Analysis of the type 1 pilin gene cluster fim in Salmonella: its distinct evolutionary histories in the 5' and 3' regions. <i>Journal of Bacteriology</i> , 1999 , 181, 1301-8	3.5	28
76	Self-inflicted wounds, template-directed gap repair and a recombination hotspot. Effects of the mariner transposase. <i>Genetics</i> , 2000 , 154, 647-56	4	28
75	The experimental assessment of fitness in Drosophila. I. Comparative measures of competitive reproductive success. <i>Genetics</i> , 1982 , 102, 455-66	4	27
74	Unexpected stability of mariner transgenes in Drosophila. <i>Genetics</i> , 2002 , 160, 527-35	4	27
73	Adaptive impact of the chimeric gene Quetzalcoatl in Drosophila melanogaster. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 10943-8	11.5	26
72	Deletion of a conserved regulatory element in the Drosophila Adh gene leads to increased alcohol dehydrogenase activity but also delays development. <i>Genetics</i> , 2000 , 156, 219-27	4	26
71	Mud sticks: on the alleged falsification of Mendel's data. <i>Genetics</i> , 2007 , 175, 975-9	4	25
70	BIOTYPING CONFIRMS A NEARLY CLONAL POPULATION STRUCTURE IN ESCHERICHIA COLI. <i>Evolution; International Journal of Organic Evolution</i> , 1986 , 40, 1-12	3.8	23
69	The evolutionary landscape of antifolate resistance in Plasmodium falciparum. <i>Journal of Genetics</i> , 2011 , 90, 187-90	1.2	22
68	Reduced germline mobility of a mariner vector containing exogenous DNA: effect of size or site?. <i>Genetics</i> , 1996 , 143, 1299-306	4	22
67	Efficient mobilization of mariner in vivo requires multiple internal sequences. <i>Genetics</i> , 2002 , 160, 519-	-264	21
66	Accessible mutational trajectories for the evolution of pyrimethamine resistance in the malaria parasite Plasmodium vivax. <i>Journal of Molecular Evolution</i> , 2013 , 77, 81-91	3.1	20
65	Dramatic Changes in Malaria Population Genetic Complexity in Dielmo and Ndiop, Senegal, Revealed Using Genomic Surveillance. <i>Journal of Infectious Diseases</i> , 2018 , 217, 622-627	7	19
64	GENETIC CONTROL OF THE RATE OF EMBRYONIC DEVELOPMENT: SELECTION FOR FASTER DEVELOPMENT AT ELEVATED TEMPERATURES. <i>Evolution; International Journal of Organic Evolution</i> , 1993 , 47, 1625-1631	3.8	19
63	The evolution of the novel Sdic gene cluster in Drosophila melanogaster. <i>Gene</i> , 2006 , 376, 174-83	3.8	17
62	Evolution of noncoding and silent coding sites in the Plasmodium falciparum and Plasmodium reichenowi genomes. <i>Molecular Biology and Evolution</i> , 2005 , 22, 1621-6	8.3	17
61	Genome size as a mutation-selection-drift process. <i>Genes and Genetic Systems</i> , 1999 , 74, 201-7	1.4	17
60	Fine-scale genetic mapping of a hybrid sterility factor between Drosophila simulans and D. mauritiana: the varied and elusive functions of "speciation genes". <i>BMC Evolutionary Biology</i> , 2010 , 10, 385	3	16

59	Modeling the genetic relatedness of Plasmodium falciparum parasites following meiotic recombination and cotransmission. <i>PLoS Computational Biology</i> , 2018 , 14, e1005923	5	15
58	Inference of selection and recombination from nucleotide sequence data*. <i>Journal of Evolutionary Biology</i> , 1991 , 4, 519-532	2.3	14
57	Joint distribution of insertion elements IS4 and IS5 in natural isolates of Escherichia coli. <i>Genetics</i> , 1985 , 111, 219-31	4	14
56	Proteostasis Environment Shapes Higher-Order Epistasis Operating on Antibiotic Resistance. <i>Genetics</i> , 2019 , 212, 565-575	4	13
55	A pivot mutation impedes reverse evolution across an adaptive landscape for drug resistance in Plasmodium vivax. <i>Malaria Journal</i> , 2016 , 15, 40	3.6	13
54	Genome-Wide Association Studies of Drug-Resistance Determinants. <i>Trends in Parasitology</i> , 2017 , 33, 214-230	6.4	12
53	Cohort Profile: The Madagascar Health and Environmental Research (MAHERY) study in north-eastern Madagascar. <i>International Journal of Epidemiology</i> , 2017 , 46, 1747-1748d	7.8	11
52	Recurrent bottlenecks in the malaria life cycle obscure signals of positive selection. <i>Parasitology</i> , 2015 , 142 Suppl 1, S98-S107	2.7	11
51	Genetic evidence that the Makira region in northeastern Madagascar is a hotspot of malaria transmission. <i>Malaria Journal</i> , 2016 , 15, 596	3.6	11
50	De Novo Mutations Resolve Disease Transmission Pathways in Clonal Malaria. <i>Molecular Biology and Evolution</i> , 2018 , 35, 1678-1689	8.3	11
49	The kinetics of transposable element autoregulation. <i>Genetica</i> , 2000 , 108, 229-37	1.5	11
48	Oviposition-site preference in Drosophila following interspecific gene transfer of the Alcohol dehydrogenase locus. <i>Behavior Genetics</i> , 1999 , 29, 199-204	3.2	10
47	Post-genomics and the neutral theory: variation and conservation in the tumor necrosis factor-alpha promoter. <i>Gene</i> , 2000 , 261, 19-25	3.8	9
46	Identification ofPorto-1, a new repeated sequence that localises close to the centromere of chromosome2 ofDrosophila melanogaster. <i>Chromosoma</i> , 1996 , 105, 211-222	2.8	9
45	Neighboring genes for DNA-binding proteins rescue male sterility in Drosophila hybrids. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, E4200-7	11.5	9
44	DNA sequence artifacts and the estimation of time to the most recent common ancestor (TMRCA) of Plasmodium falciparum. <i>Molecular and Biochemical Parasitology</i> , 2003 , 130, 143-7	1.9	8
43	Methods to Increase the Sensitivity of High Resolution Melting Single Nucleotide Polymorphism Genotyping in Malaria. <i>Journal of Visualized Experiments</i> , 2015 , e52839	1.6	7
42	The utility of genomic data for Plasmodium vivax population surveillance. <i>Pathogens and Global Health</i> , 2015 , 109, 153-61	3.1	7

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41	Genomic heterogeneity in the density of noncoding single-nucleotide and microsatellite polymorphisms in Plasmodium falciparum. <i>Gene</i> , 2007 , 387, 1-6	3.8	7
40	Forensic DNA typing dispute. <i>Nature</i> , 1994 , 372, 398-9	50.4	7
39	Erratum. <i>Science</i> , 1992 , 255, 1054-5	33.3	7
38	Genetic background and PfKelch13 affect artemisinin susceptibility of PfCoronin mutants in Plasmodium falciparum. <i>PLoS Genetics</i> , 2020 , 16, e1009266	6	7
37	Direct Gamete Sequencing Reveals No Evidence for Segregation Distortion in House Mouse Hybrids. <i>PLoS ONE</i> , 2015 , 10, e0131933	3.7	6
36	Pattern of chromosomal localization of the Hoppel transposable element family in the Drosophila melanogaster subgroup. <i>Chromosome Research</i> , 1998 , 6, 385-95	4.4	6
35	Regulatory potential of nonautonomous mariner elements and subfamily crosstalk 1999 , 107, 79-85		6
34	Potential for hitchhiking in the eda-edd-zwf gene cluster of Escherichia coli. <i>Genetical Research</i> , 1984 , 43, 229-39	1.1	6
33	Evidence for Reduced Malaria Parasite Population after Application of Population-Level Antimalarial Drug Strategies in Southern Province, Zambia. <i>American Journal of Tropical Medicine and Hygiene</i> , 2020 , 103, 66-73	3.2	6
32	Specific deletion occurring in the directed evolution of 6-phosphogluconate dehydrogenase in Escherichia coli. <i>Genetics</i> , 1984 , 108, 765-72	4	6
31	A Primer of Population Genetics and Genomics 2020 ,		6
30	Novel genes from formation to function. <i>International Journal of Evolutionary Biology</i> , 2012 , 2012, 8216	545	5
29	Position-specific polymorphism of Plasmodium falciparum Stuttering motif in a PHISTc PFI1780w. <i>Experimental Parasitology</i> , 2006 , 114, 126-8	2.1	5
28	Accessory DNAs in the bacterial gene pool: playground for coevolution. <i>Novartis Foundation Symposium</i> , 1984 , 102, 233-45		5
27	James F. Crow and the art of teaching and mentoring. <i>Genetics</i> , 2011 , 189, 1129-33	4	4
26	Variable SNP density in aspartyl-protease genes of the malaria parasite Plasmodium falciparum. <i>Gene</i> , 2006 , 376, 163-73	3.8	4
25	EST! EST!! EST!!!. <i>BioEssays</i> , 1996 , 18, 1021-3	4.1	4
24	Study Protocol: A Cross-Sectional Examination of Socio-Demographic and Ecological Determinants of Nutrition and Disease Across Madagascar. <i>Frontiers in Public Health</i> , 2020 , 8, 500	6	4

23	Reply to Velavan et al.: Polymorphisms of in natural populations: Implications for functional significance. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 12613-12614	11.5	3
22	Evolutionary History and Population Genetics of Human Malaria Parasites 2014 , 95-109		3
21	reply: How was the Sdic gene fixed?. <i>Nature</i> , 1999 , 400, 520-520	50.4	3
20	A New Take on John Maynard Smith's Concept of Protein Space for Understanding Molecular Evolution. <i>PLoS Computational Biology</i> , 2016 , 12, e1005046	5	3
19	Relevance of Higher-Order Epistasis in Drug Resistance. <i>Molecular Biology and Evolution</i> , 2021 , 38, 142-	18.13	3
18	Chimeric dihydrofolate reductases display properties of modularity and biophysical diversity. <i>Protein Science</i> , 2019 , 28, 1359-1367	6.3	2
17	Limits to Compensatory Mutations: Insights from Temperature-Sensitive Alleles. <i>Molecular Biology and Evolution</i> , 2019 , 36, 1874-1883	8.3	2
16	Identification of Porto-1, a new repeated sequence that localises close to the centromere of chromosome 2 of Drosophila melanogaster. <i>Chromosoma</i> , 1996 , 105, 211-222	2.8	2
15	USING FREQUENCY DISTRIBUTIONS TO DETECT SELECTION: INVERSION POLYMORPHISMS IN DROSOPHILA PSEUDOOBSCURA. <i>Evolution; International Journal of Organic Evolution</i> , 1981 , 35, 1243-1	248	2
14	Regulatory potential of nonautonomous mariner elements and subfamily crosstalk 2000, 79-85		2
13	Regulation of the transposable element mariner. <i>Contemporary Issues in Genetics and Evolution</i> , 1997 , 177-184		2
12	Cohort Description of the Madagascar Health and Environmental Research-Antongil (MAHERY-Antongil) Study in Madagascar. <i>Frontiers in Nutrition</i> , 2019 , 6, 109	6.2	2
11	Experimental evolution for niche breadth in bacteriophage T4 highlights the importance of structural genes. <i>MicrobiologyOpen</i> , 2020 , 9, e968	3.4	1
10	Proteostasis environment shapes higher-order epistasis operating on antibiotic resistance		1
9	A Response to L\(\text{\text{B}}\) Drieu et al., 2020, \(\text{\text{L}}\) It Possible to Identify Ancient Wine Production Using Biomolecular Approaches? \(\text{\text{[STAR: Science & Technology of Archaeological Research, DOI:10.1080/20548923.2020.1738728)}. \(Science \) and \(Technology \) of \(Archaeological \) Research, \(\text{2021}\), \(7, 43-43).	1.2 8	1
8	Genetic surveillance for monitoring the impact of drug use on Plasmodium falciparum populations. <i>International Journal for Parasitology: Drugs and Drug Resistance</i> , 2021 , 17, 12-22	4	1
7	Remembering Richard Lewontin (1929\(\textbf{Q}\)021). <i>Biological Theory</i> , 2021 , 16, 257	1.7	О
6	Fine-scale variation in malaria prevalence across ecological regions in Madagascar: a cross-sectional study. <i>BMC Public Health</i> , 2021 , 21, 1018	4.1	O

LIST OF PUBLICATIONS

5 James Franklin Crow. 18 January 1916 A January 2012. Biographical Memoirs of Fellows of the Royal Society, 2014, 60, 151-167 Gene expression profiling in evolutionary genetics 2004, 74-93 3 Genome Organization and Gene Expression Shape the Distribution of Transposable Elements in the Euchromatin of Drosophila Melanogaster. PLoS Genetics, 2005, preprint, e210

Q & A with Daniel L. Hartl, Recipient of the 2019 Thomas Hunt Morgan Medal. Genetics, 2019, 212, 361-363

Switching an active site helix in dihydrofolate reductase reveals limits to subdomain modularity. 1 2.9 Biophysical Journal, 2021, 120, 4738-4750