Graham Bell

List of Publications by Year in descending order

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38660 35952 10,323 108 50 97 citations h-index g-index papers 113 113 113 11067 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Global Mapping of the Yeast Genetic Interaction Network. Science, 2004, 303, 808-813.	6.0	1,908
2	Evolutionary rescue can prevent extinction following environmental change. Ecology Letters, 2009, 12, 942-948.	3.0	450
3	The Distribution of Abundance in Neutral Communities. American Naturalist, 2000, 155, 606-617.	1.0	378
4	Fluctuating selection: the perpetual renewal of adaptation in variable environments. Philosophical Transactions of the Royal Society B: Biological Sciences, 2010, 365, 87-97.	1.8	345
5	Phenotypic consequences of 1,000 generations of selection at elevated CO2 in a green alga. Nature, 2004, 431, 566-569.	13.7	337
6	Adaptation and Evolutionary Rescue in Metapopulations Experiencing Environmental Deterioration. Science, 2011, 332, 1327-1330.	6.0	331
7	Experimental evolution of resistance to an antimicrobial peptide. Proceedings of the Royal Society B: Biological Sciences, 2006, 273, 251-256.	1.2	330
8	Diversity peaks at intermediate productivity in a laboratory microcosm. Nature, 2000, 406, 508-512.	13.7	308
9	Disturbance and diversity in experimental microcosms. Nature, 2000, 408, 961-964.	13.7	276
10	Adaptation, extinction and global change. Evolutionary Applications, 2008, 1, 3-16.	1.5	258
11	The Ecology and Genetics of Fitness in Forest Plants. II. Microspatial Heterogeneity of the Edaphic Environment. Journal of Ecology, 1991, 79, 687.	1.9	249
12	Evolutionary rescue and the limits of adaptation. Philosophical Transactions of the Royal Society B: Biological Sciences, 2013, 368, 20120080.	1.8	243
13	Evolutionary Rescue. Annual Review of Ecology, Evolution, and Systematics, 2017, 48, 605-627.	3.8	236
14	THE ECOLOGY AND GENETICS OF FITNESS IN CHLAMYDOMONAS. XII. REPEATED SEXUAL EPISODES INCREASE RATES OF ADAPTATION TO NOVEL ENVIRONMENTS. Evolution; International Journal of Organic Evolution, 2002, 56, 1743-1753.	1.1	226
15	Mammalian chiasma frequencies as a test of two theories of recombination. Nature, 1987, 326, 803-805.	13.7	213
16	Speciation driven by hybridization and chromosomal plasticity in a wild yeast. Nature Microbiology, 2016, 1, 15003.	5.9	161
17	The advantage of sex in evolving yeast populations. Nature, 1997, 388, 465-468.	13.7	159
18	The evolution of a pleiotropic fitness tradeoff in Pseudomonas fluorescens. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 8072-8077.	3.3	156

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19	Experimental evolution in Chlamydomonas. III. Evolution of specialist and generalist types in environments that vary in space and time. Heredity, 1997, 78, 507-514.	1.2	149
20	Sex differences in recombination. Journal of Evolutionary Biology, 1991, 4, 259-277.	0.8	135
21	Short-term selection for recombination among mutually antagonistic species. Nature, 1987, 328, 66-68.	13.7	126
22	THE CO-DISTRIBUTION OF SPECIES IN RELATION TO THE NEUTRAL THEORY OF COMMUNITY ECOLOGY. Ecology, 2005, 86, 1757-1770.	1.5	125
23	Arming the enemy: the evolution of resistance to self-proteins. Microbiology (United Kingdom), 2003, 149, 1367-1375.	0.7	122
24	Evolutionary rescue and adaptation to abrupt environmental change depends upon the history of stress. Philosophical Transactions of the Royal Society B: Biological Sciences, 2013, 368, 20120079.	1.8	115
25	Saccharomyces sensu stricto as a model system for evolution and ecology. Trends in Ecology and Evolution, 2008, 23, 494-501.	4.2	113
26	The effect of elevated CO2 on growth and competition in experimental phytoplankton communities. Global Change Biology, 2011, 17, 2525-2535.	4.2	110
27	A Gillnet Fishery Considered as an Experiment in Artificial Selection. Journal of the Fisheries Research Board of Canada, 1977, 34, 954-961.	1.0	107
28	Experimental Evolution of Pseudomonas fluorescensin Simple and Complex Environments. American Naturalist, 2005, 166, 470-480.	1.0	98
29	The Ecology and Genetics of Fitness in Forest Plants. I. Environmental Heterogeneity Measured by Explant Trials. Journal of Ecology, 1991, 79, 663.	1.9	85
30	EVOLUTIONARY RESCUE OF SEXUAL AND ASEXUAL POPULATIONS IN A DETERIORATING ENVIRONMENT. Evolution; International Journal of Organic Evolution, 2012, 66, 3508-3518.	1.1	79
31	AN EXPERIMENTAL TEST OF LOCAL ADAPTATION IN SOIL BACTERIA. Evolution; International Journal of Organic Evolution, 2003, 57, 27-36.	1.1	78
32	Experimental evolution in Chlamydomonas. IV. Selection in environments that vary through time at different scales. Heredity, 1998, 80, 732-741.	1.2	76
33	MEASURING THE COST OF REPRODUCTION. I. THE CORRELATION STRUCTURE OF THE LIFE TABLE OF A PLANKTON ROTIFER. Evolution; International Journal of Organic Evolution, 1984, 38, 300-313.	1.1	73
34	Mild environmental stress elicits mutations affecting fitness inChlamydomonas. Proceedings of the Royal Society B: Biological Sciences, 2000, 267, 123-129.	1.2	70
35	The Search for  Evolution-Proof' Antibiotics. Trends in Microbiology, 2018, 26, 471-483.	3.5	68
36	Evolution of natural algal populations at elevated CO2. Ecology Letters, 2006, 9, 129-135.	3.0	67

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37	Experimental Adaptive Radiation inPseudomonas. American Naturalist, 2002, 160, 569-581.	1.0	65
38	Macroevolution simulated with autonomously replicating computer programs. Nature, 2002, 420, 810-812.	13.7	65
39	Community rescue in experimental metacommunities. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 14307-14312.	3.3	65
40	THE ECOLOGY AND GENETICS OF FITNESS IN CHLAMYDOMONAS. VIII. THE DYNAMICS OF ADAPTATION TO NOVEL ENVIRONMENTS AFTER A SINGLE EPISODE OF SEX. Evolution; International Journal of Organic Evolution, 2002, 56, 14-21.	1.1	64
41	Aquatic primary production in a high-CO2 world. Trends in Ecology and Evolution, 2014, 29, 223-232.	4.2	64
42	Environmental heterogeneity and species diversity of forest sedges. Journal of Ecology, 2000, 88, 67-87.	1.9	63
43	The interpretation of biological surveys. Proceedings of the Royal Society B: Biological Sciences, 2003, 270, 2531-2542.	1.2	63
44	Mutations of intermediate effect are responsible for adaptation in evolving Pseudomonas fluorescens populations. Biology Letters, 2006, 2, 236-238.	1.0	63
45	Changes in C uptake in populations of Chlamydomonas reinhardtii selected at high CO2. Plant, Cell and Environment, 2006, 29, 1812-1819.	2.8	63
46	Experimental evolution in Chlamydomonas II. Genetic variation in strongly contrasted environments. Heredity, 1997, 78, 498-506.	1.2	61
47	Recombination and the immortality of the germ line. Journal of Evolutionary Biology, 1988, 1, 67-82.	0.8	58
48	Measuring the cost of reproduction. Oecologia, 1984, 64, 81-86.	0.9	56
49	MEASURING THE COST OF REPRODUCTION. II. THE CORRELATION STRUCTURE OF THE LIFE TABLES OF FIVE FRESHWATER INVERTEBRATES. Evolution; International Journal of Organic Evolution, 1984, 38, 314-326.	1.1	55
50	CO2 alters community composition and response to nutrient enrichment of freshwater phytoplankton. Oecologia, 2015, 177, 875-883.	0.9	53
51	Divergent evolution during an experimental adaptive radiation. Proceedings of the Royal Society B: Biological Sciences, 2003, 270, 1645-1650.	1.2	52
52	Resource competition and adaptive radiation in a microbial microcosm. Ecology Letters, 2004, 8, 38-46.	3.0	52
53	The small-scale spatial distribution of male and female plants. Oecologia, 1989, 80, 229-235.	0.9	51
54	THE COMPARATIVE EVIDENCE RELATING TO FUNCTIONAL AND NEUTRAL INTERPRETATIONS OF BIOLOGICAL COMMUNITIES. Ecology, 2006, 87, 1378-1386.	1.5	49

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55	Cross–Cordillera exchange mediated by the Panama Canal increased the species richness of local freshwater fish assemblages. Proceedings of the Royal Society B: Biological Sciences, 2004, 271, 1889-1896.	1.2	46
56	Community rescue in experimental phytoplankton communities facing severe herbicide pollution. Nature Ecology and Evolution, 2020, 4, 578-588.	3.4	45
57	Long-term culture at elevated atmospheric CO ₂ fails to evoke specific adaptation in seven freshwater phytoplankton species. Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20122598.	1.2	42
58	Partitioning the transplant site effect in reciprocal transplant experiments with Impatiens capensis and Impatiens pallida. Oecologia, 1986, 70, 149-154.	0.9	39
59	NOTE. ISOLATION OF FOUR NEW STRAINS OF CHLAMYDOMONAS REINHARDTII (CHLOROPHYTA) FROM SOIL SAMPLES1. Journal of Phycology, 1994, 30, 770-773.	1.0	39
60	Experimental genomics of fitness in yeast. Proceedings of the Royal Society B: Biological Sciences, 2010, 277, 1459-1467.	1.2	38
61	THE HANDICAP PRINCIPLE IN SEXUAL SELECTION. Evolution; International Journal of Organic Evolution, 1978, 32, 872-885.	1.1	37
62	EXPERIMENTAL EVOLUTION OF HETEROTROPHY IN A GREEN ALGA. Evolution; International Journal of Organic Evolution, 2013, 67, 468-476.	1.1	33
63	THE ECOLOGY AND GENETICS OF FITNESS IN <i>CHLAMYDOMONAS.</i> V. THE RELATIONSHIP BETWEEN GENETIC CORRELATION AND ENVIRONMENTAL VARIANCE. Evolution; International Journal of Organic Evolution, 1992, 46, 561-566.	1.1	32
64	Experimental adaptation to marine conditions by a freshwater alga. Evolution; International Journal of Organic Evolution, 2015, 69, 2662-2675.	1.1	27
65	The Ecology and Genetics of Fitness in Chlamydomonas III. Genotype-By- Environment Interaction Within Strains. Evolution; International Journal of Organic Evolution, 1991, 45, 668.	1.1	25
66	Experimental evolution in Chlamydomonas. III. Evolution of specialist and generalist types in environments that vary in space and time. Heredity, 1997, 78, 507-514.	1.2	25
67	REWINDING THE TAPE: SELECTION OF ALGAE ADAPTED TO HIGH CO2AT CURRENT AND PLEISTOCENE LEVELS OF CO2. Evolution; International Journal of Organic Evolution, 2006, 60, 1392-1401.	1.1	24
68	Measuring the cost of reproduction. Oecologia, 1983, 60, 378-383.	0.9	23
69	Patterns of population structure and complex haplotype sharing among field isolates of the green algaChlamydomonas reinhardtii. Molecular Ecology, 2019, 28, 3977-3993.	2.0	23
70	Trophic structure modulates community rescue following acidification. Proceedings of the Royal Society B: Biological Sciences, 2019, 286, 20190856.	1.2	22
71	THE ECOLOGY AND GENETICS OF FITNESS IN <i>CHLAMYDOMONAS</i> . IV. THE PROPERTIES OF MIXTURES OF GENOTYPES OF THE SAME SPECIES. Evolution; International Journal of Organic Evolution, 1991, 45, 1036-1046.	1.1	20
72	THE ECOLOGY AND GENETICS OF FITNESS IN CHLAMYDOMONAS. IX. THE RATE OF ACCUMULATION OF VARIATION OF FITNESS UNDER SELECTION. Evolution; International Journal of Organic Evolution, 2000, 54, 416-424.	1.1	20

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73	THE ECOLOGY AND GENETICS OF FITNESS IN CHLAMYDOMONAS. XIII. FITNESS OF LONG-TERM SEXUAL AND ASEXUAL POPULATIONS IN BENIGN ENVIRONMENTS. Evolution; International Journal of Organic Evolution, 2006, 60, 2272-2279.	1.1	19
74	Evolutionary rescue of a green alga kept in the dark. Biology Letters, 2013, 9, 20120823.	1.0	19
75	The ghosts of selection past reduces the probability of plastic rescue but increases the likelihood of evolutionary rescue to novel stressors in experimental populations of wild yeast. Ecology Letters, 2016, 19, 289-298.	3.0	19
76	Yeasts from temperate forests. Yeast, 2022, 39, 4-24.	0.8	18
77	OPTIMALITY AND CONSTRAINT IN A SELF-FERTILIZED ALGA. Evolution; International Journal of Organic Evolution, 1986, 40, 194-198.	1.1	16
78	Metabolic variation in natural populations of wild yeast. Ecology and Evolution, 2015, 5, 722-732.	0.8	16
79	The ecology and genetics of fitness in forest plants. IV. Quantitative genetics of fitness components in Impatiens pallida (Balsaminaceae)., 1994, 81, 232.		16
80	Red Queen versus Tangled Bank models. Nature, 1987, 330, 118-118.	13.7	15
81	THE DYNAMICS OF DIVERSIFICATION IN EVOLVING PSEUDOMONAS POPULATIONS. Evolution; International Journal of Organic Evolution, 2006, 60, 484-490.	1.1	14
82	THE ECOLOGY AND GENETICS OF FITNESS IN <i>CHLAMYDOMONAS</i> III. GENOTYPE-BY-ENVIRONMENT INTERACTION WITHIN STRAINS. Evolution; International Journal of Organic Evolution, 1991, 45, 668-679.	1.1	13
83	The ecology and genetics of fitness in forest plants. IV. Quantitative genetics of fitness components in <i>Impatiens pallida</i> (Balsaminaceae). American Journal of Botany, 1994, 81, 232-239.	0.8	13
84	The Ecology and Genetics of Fitness in Chlamydomonas. V. The Relationship between Genetic Correlation and Environmental Variance. Evolution; International Journal of Organic Evolution, 1992, 46, 561.	1.1	12
85	Tests of sib diversification theories of outcrossing in Impatiens capensis: Effects of inbreeding and neighbour relatedness on production and infestation. Journal of Evolutionary Biology, 1992, 5, 575-588.	0.8	12
86	Pathogen evolution within host individuals as a primary cause of senescence. Genetica, 1993, 91, 21-34.	0.5	12
87	Communities that thrive in extreme conditions captured from a freshwater lake. Biology Letters, 2016, 12, 20160562.	1.0	12
88	Resistance, resilience, and functional redundancy of freshwater bacterioplankton communities facing a gradient of agricultural stressors in a mesocosm experiment. Molecular Ecology, 2021, 30, 4771-4788.	2.0	12
89	Widespread agrochemicals differentially affect zooplankton biomass and community structure. Ecological Applications, 2021, 31, e02423.	1.8	12
90	REPLY TO REZNICK ET AL Evolution; International Journal of Organic Evolution, 1986, 40, 1344-1346.	1.1	10

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91	THE ECOLOGY AND GENETICS OF FITNESS IN <i>CHLAMYDOMONAS.</i> VII. THE EFFECT OF SEX ON THE VARIANCE IN FITNESS AND MEAN FITNESS. Evolution; International Journal of Organic Evolution, 1996, 50, 1705-1713.	1.1	10
92	Experimental macroevolution < sup />. Proceedings of the Royal Society B: Biological Sciences, 2016, 283, 20152547.	1.2	10
93	DEVELOPMENTAL MUTANTS OF (i) VOLVOX (i): DOES MUTATION RECREATE THE PATTERNS OF PHYLOGENETIC DIVERSITY?. Evolution; International Journal of Organic Evolution, 1991, 45, 1806-1822.	1.1	8
94	Sources of variance in protein heterozygosity: the importance of the species-protein interaction. Heredity, 1992, 68, 241-252.	1.2	7
95	TRANSPOSON ABUNDANCE IN SEXUAL AND ASEXUAL POPULATIONS OF (i) CHLAMYDOMONAS REINHARDTII (i). Evolution; International Journal of Organic Evolution, 1994, 48, 1406-1409.	1.1	7
96	The incidental response to uniform natural selection. Biology Letters, 2013, 9, 20130215.	1.0	6
97	Variation in growth rate in a natural assemblage of unicellular green soil algae. Heredity, 2001, 87, 162-171.	1.2	5
98	THE ECOLOGY AND GENETICS OF FITNESS IN CHLAMYDOMONAS. XII. REPEATED SEXUAL EPISODES INCREASE RATES OF ADAPTATION TO NOVEL ENVIRONMENTS. Evolution; International Journal of Organic Evolution, 2002, 56, 1743.	1.1	4
99	The poverty of the protists. , 2001, , 46-58.		3
100	Response to Hancock. Microbiology (United Kingdom), 2003, 149, 3344-3345.	0.7	3
100	Response to Hancock. Microbiology (United Kingdom), 2003, 149, 3344-3345. The phylogenetic interpretation of biological surveys. Oikos, 2013, 122, 1380-1392.	0.7	3
101	The phylogenetic interpretation of biological surveys. Oikos, 2013, 122, 1380-1392. Trophic dynamics of a simple model ecosystem. Proceedings of the Royal Society B: Biological	1.2	3
101	The phylogenetic interpretation of biological surveys. Oikos, 2013, 122, 1380-1392. Trophic dynamics of a simple model ecosystem. Proceedings of the Royal Society B: Biological Sciences, 2017, 284, 20171463. Every inch a finch: a commentary on Grant (1993) †Hybridization of Darwin's finches on Isla Daphne Major, Galapagos'. Philosophical Transactions of the Royal Society B: Biological Sciences, 2015, 370,	1.2	3
101 102 103	The phylogenetic interpretation of biological surveys. Oikos, 2013, 122, 1380-1392. Trophic dynamics of a simple model ecosystem. Proceedings of the Royal Society B: Biological Sciences, 2017, 284, 20171463. Every inch a finch: a commentary on Grant (1993) †Hybridization of Darwin's finches on Isla Daphne Major, Galapagos'. Philosophical Transactions of the Royal Society B: Biological Sciences, 2015, 370, 20140287.	1.2 1.2	3 3
101 102 103	The phylogenetic interpretation of biological surveys. Oikos, 2013, 122, 1380-1392. Trophic dynamics of a simple model ecosystem. Proceedings of the Royal Society B: Biological Sciences, 2017, 284, 20171463. Every inch a finch: a commentary on Grant (1993) †Hybridization of Darwin's finches on Isla Daphne Major, Galapagos†Heliosophical Transactions of the Royal Society B: Biological Sciences, 2015, 370, 20140287. U-shaped gene frequency distributions. Nature, 1977, 268, 374-374.	1.2 1.2	3 3 2 1
101 102 103 104	The phylogenetic interpretation of biological surveys. Oikos, 2013, 122, 1380-1392. Trophic dynamics of a simple model ecosystem. Proceedings of the Royal Society B: Biological Sciences, 2017, 284, 20171463. Every inch a finch: a commentary on Grant (1993) †Hybridization of Darwin's finches on Isla Daphne Major, Galapagos'. Philosophical Transactions of the Royal Society B: Biological Sciences, 2015, 370, 20140287. U-shaped gene frequency distributions. Nature, 1977, 268, 374-374. Ill.6. Responses to Selection: Experimental Populations. , 2013, , 230-237. Further observations on the fate of morphological variation in a population of Smooth newt larvae	1.2 1.8 13.7	3 3 2 1