Michael R Rose

List of Publications by Year
in descending order

134 papers	9,256 citations	87843 38 h-index	43868 91 g-index
142 all docs	142 docs citations	142 times ranked	5293 citing authors

#	Article	IF	Citations
1	Long-Term Experimental Evolution in Escherichia coli. I. Adaptation and Divergence During 2,000 Generations. American Naturalist, 1991, 138, 1315-1341.	1.0	1,441
2	LABORATORY EVOLUTION OF POSTPONED SENESCENCE INDROSOPHILA MELANOGASTER. Evolution; International Journal of Organic Evolution, 1984, 38, 1004-1010.	1.1	546
3	Genome-wide analysis of a long-term evolution experiment with Drosophila. Nature, 2010, 467, 587-590.	13.7	410
4	GENETICS OF LIFE HISTORY IN DROSOPHILA MELANOGASTER. II. EXPLORATORY SELECTION EXPERIMENTS. Genetics, 1981, 97, 187-196.	1.2	394
5	Antagonistic pleiotropy, dominance, and genetic variation. Heredity, 1982, 48, 63-78.	1.2	385
6	Laboratory Evolution of Postponed Senescence in Drosophila melanogaster. Evolution; International Journal of Organic Evolution, 1984, 38, 1004.	1.1	376
7	Phenotypic plasticity and selection in Drosophila life-history evolution. I. Nutrition and the cost of reproduction. Journal of Evolutionary Biology, 1993, 6, 171-193.	0.8	375
8	A test of evolutionary theories of senescence. Nature, 1980, 287, 141-142.	13.7	337
9	Hormones and the Physiological Architecture of Life History Evolution. Quarterly Review of Biology, 1995, 70, 1-52.	0.0	321
10	Selection on stress resistance increases longevity in Drosophila melanogaster. Experimental Gerontology, 1992, 27, 241-250.	1.2	292
11	GENETIC COVARIATION AMONG LIFE-HISTORY COMPONENTS: THE EFFECT OF NOVEL ENVIRONMENTS. Evolution; International Journal of Organic Evolution, 1985, 39, 943-945.	1.1	263
12	Experimental Evolution. , 2009, , .		175
13	COMPLEX TRADE-OFFS AND THE EVOLUTION OF STARVATION RESISTANCE IN DROSOPHILA MELANOGASTER. Evolution; International Journal of Organic Evolution, 1996, 50, 753-766.	1.1	169
14	Variation in the reversibility of evolution. Nature, 2000, 408, 463-466.	13.7	160
15	RESOURCE ACQUISITION AND THE EVOLUTION OF STRESS RESISTANCE INDROSOPHILA MELANOGASTER. Evolution; International Journal of Organic Evolution, 1998, 52, 1342-1352.	1.1	150
16	Experimental evolution reveals natural selection on standing genetic variation. Nature Genetics, 2009, 41, 251-257.	9.4	143
17	Genetic Covariation in Drosophila Life History: Untangling the Data. American Naturalist, 1984, 123, 565-569.	1.0	136
18	Complex Trade-Offs and the Evolution of Starvation Resistance in Drosophila melanogaster. Evolution; International Journal of Organic Evolution, 1996, 50, 753.	1.1	123

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19	DOES SELECTION FOR STRESS RESISTANCE LOWER METABOLIC RATE?. Ecology, 1997, 78, 828-837.	1.5	122
20	EXPERIMENTAL EVOLUTION OF ACCELERATED DEVELOPMENT INDROSOPHILA.1. DEVELOPMENTAL SPEED AND LARVAL SURVIVAL. Evolution; International Journal of Organic Evolution, 1997, 51, 1536-1551.	1.1	111
21	Genetic Covariation Among Life-History Components: The Effect of Novel Environments. Evolution; International Journal of Organic Evolution, 1985, 39, 943.	1.1	110
22	PERSPECTIVE: REVERSE EVOLUTION. Evolution; International Journal of Organic Evolution, 2001, 55, 653.	1.1	105
23	High-frequency genomic rearrangements involving archaebacterial repeat sequence elements. Nature, 1982, 299, 182-185.	13.7	103
24	HAMILTON'S FORCES OF NATURAL SELECTION AFTER FORTY YEARS. Evolution; International Journal of Organic Evolution, 2007, 61, 1265-1276.	1.1	94
25	The Gompertz equation as a predictive tool in demography. Experimental Gerontology, 1995, 30, 553-569.	1.2	92
26	LONG-TERM LABORATORY EVOLUTION OF A GENETIC LIFE-HISTORY TRADE-OFF IN DROSOPHILA MELANOGASTER . 1. THE ROLE OF GENOTYPE-BY-ENVIRONMENT INTERACTION. Evolution; International Journal of Organic Evolution, 1994, 48, 1244-1257.	1.1	86
27	EVOLUTION OF LATE-LIFE MORTALITY IN DROSOPHILA MELANOGASTER. Evolution; International Journal of Organic Evolution, 2002, 56, 1982-1991.	1.1	85
28	Experimental Evolution of Accelerated Development in Drosophila. 1. Developmental Speed and Larval Survival. Evolution; International Journal of Organic Evolution, 1997, 51, 1536.	1.1	79
29	HOW REPEATABLE IS ADAPTIVE EVOLUTION? THE ROLE OF GEOGRAPHICAL ORIGIN AND FOUNDER EFFECTS IN LABORATORY ADAPTATION. Evolution; International Journal of Organic Evolution, 2008, 62, 1817-1829.	1.1	79
30	THE EVOLUTION OF DEVELOPMENT INDROSOPHILA MELANOGASTERSELECTED FOR POSTPONED SENESCENCE. Evolution; International Journal of Organic Evolution, 1994, 48, 1880-1899.	1.1	78
31	Theories of Life-History Evolution. American Zoologist, 1983, 23, 15-23.	0.7	74
32	What is Aging?. Frontiers in Genetics, 2012, 3, 134.	1.1	67
33	Long-Term Laboratory Evolution of a Genetic Life-History Trade-Off in Drosophila melanogaster. 1. The Role of Genotype-by-Environment Interaction. Evolution; International Journal of Organic Evolution, 1994, 48, 1244.	1.1	64
34	The new biology: beyond the Modern Synthesis. Biology Direct, 2007, 2, 30.	1.9	62
35	The effect of superoxide dismutase alleles on aging inDrosophila. Genetica, 1993, 91, 143-149.	0.5	61
36	Testing the heterogeneity theory of late-life mortality plateaus by using cohorts of Drosophila melanogaster. Experimental Gerontology, 2000, 35, 71-84.	1.2	59

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37	The morphology of postponed senescence in Drosophila melanogaster. Canadian Journal of Zoology, 1984, 62, 1576-1580.	0.4	58
38	LONG-TERM LABORATORY EVOLUTION OF A GENETIC LIFE-HISTORY TRADE-OFF INDROSOPHILA MELANOGASTER. 2. STABILITY OF GENETIC CORRELATIONS. Evolution; International Journal of Organic Evolution, 1994, 48, 1258-1268.	1.1	44
39	Do longevity mutants always show trade-offs?. Experimental Gerontology, 2006, 41, 1055-1058.	1.2	43
40	Genome-Wide Association Study of Extreme Longevity in Drosophila melanogaster. Genome Biology and Evolution, 2014, 6, 1-11.	1.1	42
41	The evolution of late life. Ageing Research Reviews, 2006, 5, 14-32.	5.0	41
42	Evolutionary patterns among measures of aging. Experimental Gerontology, 1996, 31, 507-516.	1.2	40
43	Statistical tests of demographic heterogeneity theories. Experimental Gerontology, 2003, 38, 373-386.	1.2	39
44	Pioglitazone: an anti-diabetic compound with anti-aging properties. Biogerontology, 2007, 8, 639-651.	2.0	39
45	Lifelong heterogeneity in fecundity is insufficient to explain late-life fecundity plateaus in Drosophila melanogaster. Experimental Gerontology, 2005, 40, 660-670.	1.2	38
46	ARTIFICIAL SELECTION ON A FITNESS-COMPONENT IN DROSOPHILA MELANOGASTER. Evolution; International Journal of Organic Evolution, 1984, 38, 516-526.	1.1	36
47	THE SYMMETRY OF CORRELATED SELECTION RESPONSES IN ADAPTIVE EVOLUTION: AN EXPERIMENTAL STUDY USINGDROSOPHILA. Evolution; International Journal of Organic Evolution, 1997, 51, 163-172.	1.1	36
48	Aging, fertility, and immortality. Experimental Gerontology, 2003, 38, 27-33.	1.2	36
49	Rapid divergence and convergence of lifeâ€history in experimentally evolved Drosophila melanogaster. Evolution; International Journal of Organic Evolution, 2016, 70, 2085-2098.	1.1	35
50	Adaptation, aging, and genomic information. Aging, 2009, 1, 444-450.	1.4	35
51	Laboratory Selection Quickly Erases Historical Differentiation. PLoS ONE, 2014, 9, e96227.	1.1	33
52	A revolution for aging research. Biogerontology, 2006, 7, 269-277.	2.0	32
53	Evolution of ageing since Darwin. Journal of Genetics, 2008, 87, 363-371.	0.4	32
54	Two-dimensional protein electrophoretic analysis of postponed aging inDrosophila. Genetica, 1993, 91, 183-198.	0.5	31

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55	The Respiratory Pattern in Drosophila melanogaster Selected for Desiccation Resistance Is Not Associated with the Observed Evolution of Decreased Locomotory Activity. Physiological and Biochemical Zoology, 2004, 77, 10-17.	0.6	30
56	Experimental Evolution of Accelerated Development in Drosophila. 2. Adult Fitness and the Fast Development Syndrome. , 2004, , 413-435.		28
57	Genetics of increased lifespan in drosophila. BioEssays, 1989, 11, 132-135.	1.2	27
58	Ageing and immortality. Philosophical Transactions of the Royal Society B: Biological Sciences, 2000, 355, 1657-1662.	1.8	27
59	Evolution of larval foraging behaviour in Drosophila and its effects on growth and metabolic rates. Physiological Entomology, 2005, 30, 262-269.	0.6	27
60	CONVERGENCE TO A NOVEL ENVIRONMENT: COMPARATIVE METHOD VERSUSEXPERIMENTAL EVOLUTION. Evolution; International Journal of Organic Evolution, 2004, 58, 1503-1510.	1.1	26
61	Convergence to a novel environment: comparative method versus experimental evolution. Evolution; International Journal of Organic Evolution, 2004, 58, 1503-10.	1.1	24
62	Late Life: A New Frontier for Physiology. Physiological and Biochemical Zoology, 2005, 78, 869-878.	0.6	23
63	Rules for the use of model organisms in antiaging pharmacology. Aging Cell, 2006, 5, 17-22.	3.0	22
64	An evolutionary no manâ€™s land. Trends in Ecology and Evolution, 2000, 15, 206.	4.2	21
65	Paradoxical Physiological Transitions from Aging to Late Life inDrosophila. Rejuvenation Research, 2012, 15, 49-58.	0.9	21
66	Predictable phenotypic, but not karyotypic, evolution of populations with contrasting initial history. Scientific Reports, 2017, 7, 913.	1.6	20
67	Evolutionary dynamics of molecular markers during local adaptation: a case study in Drosophila subobscura. BMC Evolutionary Biology, 2008, 8, 66.	3.2	19
68	ALLOZYMIC DIFFERENTIATION IN RESPONSE TO LABORATORY DEMOGRAPHIC SELECTION OFDROSOPHILA MELANOGASTER. Evolution; International Journal of Organic Evolution, 1997, 51, 865-872.	1.1	18
69	Mutation Accumulation Affects Male Virility inDrosophilaSelected for Later Reproduction. Physiological and Biochemical Zoology, 2007, 80, 461-472.	0.6	18
70	Long-Term Functional Side-Effects of Stimulants and Sedatives in Drosophila melanogaster. PLoS ONE, 2009, 4, e6578.	1.1	18
71	New Experiments for an Undivided Genetics. Genetics, 2011, 188, 1-10.	1.2	18
72	Genome-wide analysis of long-term evolutionary domestication in Drosophila melanogaster. Scientific Reports, 2016, 6, 39281.	1.6	18

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73	Does Aging Stop?. Current Aging Science, 2009, 2, 3-11.	0.4	17
74	Allozymic Differentiation in Response to Laboratory Demographic Selection of Drosophila melanogaster. Evolution; International Journal of Organic Evolution, 1997, 51, 865.	1.1	16
75	Ageing: The Many-Headed Monster. Current Biology, 2002, 12, R311-R312.	1.8	16
76	Effects of evolutionary history on genome wide and phenotypic convergence in Drosophila populations. BMC Genomics, 2018, 19, 743.	1.2	16
77	Evolution of human lifespan: Past, future, and present. , 1998, 10, 409-420.		15
78	Fast evolutionary genetic differentiation during experimental colonizations. Journal of Genetics, 2013, 92, 183-194.	0.4	15
79	Genome-Wide Mapping of Geneâ€“Phenotype Relationships in Experimentally Evolved Populations. Molecular Biology and Evolution, 2018, 35, 2085-2095.	3.5	14
80	EVOLUTION OF LATE-LIFE MORTALITY IN DROSOPHILA MELANOGASTER. Evolution; International Journal of Organic Evolution, 2002, 56, 1982.	1.1	13
81	Prospects for postponing human aging. FASEB Journal, 1994, 8, 925-928.	0.2	12
82	Effective population size and evolutionary dynamics in outbred laboratory populations of Drosophila. Journal of Genetics, 2013, 92, 349-361.	0.4	12
83	Drosophila transcriptomics with and without ageing. Biogerontology, 2019, 20, 699-710.	2.0	12
84	Pharmacology, Genomics, and the Evolutionary Biology of Ageing. Free Radical Research, 2002, 36, 1293-1297.	1.5	11
85	Genomic Croesus: Experimental evolutionary genetics of Drosophila aging. Experimental Gerontology, 2011, 46, 397-403.	1.2	11
86	Making SENSE: Strategies for Engineering Negligible Senescence Evolutionarily. Rejuvenation Research, 2008, 11, 527-534.	0.9	9
87	Brief Early-Life Non-Specific Incorporation of Deuterium Extends Mean Life Span inDrosophila melanogasterWithout Affecting Fecundity. Rejuvenation Research, 2013, 16, 98-104.	0.9	9
88	How phenotypic convergence arises in experimental evolution. Evolution; International Journal of Organic Evolution, 2019, 73, 1839-1849.	1.1	9
89	Adaptive and nonadaptive explanations of sociopathy. Behavioral and Brain Sciences, 1995, 18, 566-567.	0.4	8
90	Phenotypic plasticity and selection in Drosophila life-history evolution. I. Nutrition and the cost of reproduction. , 2004, , 122-144.		8

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91	The janiform genetics of aging. Genetica, 1993, 91, 3-10.	0.5	6
92	PHYSIOLOGICAL MECHANISMS OF EVOLVED DESICCATION RESISTANCE IN DROSOPHILA MELANOGASTER. , 2004, , 89-100.		6
93	Starvation but not locomotion enhances heart robustness in Drosophila. Journal of Insect Physiology, 2017, 99, 8-14.	0.9	6
94	Experimental Evolution and Heart Function inDrosophila. Physiological and Biochemical Zoology, 2017, 90, 281-293.	0.6	6
95	Diet and Botanical Supplementation: Combination Therapy for Healthspan Improvement?. Rejuvenation Research, 2021, 24, 331-344.	0.9	6
96	Hamiltonian patterns of age-dependent adaptation to novel environments. PLoS ONE, 2020, 15, e0240132.	1.1	6
97	Electrophoretic Analysis of Methuselah Flies from Multiple Species. , 2004, , 237-248.		5
98	PERSPECTIVE: REVERSE EVOLUTION. Evolution; International Journal of Organic Evolution, 2001, 55, 653-660.	1.1	5
99	An Evolutionary and Genomic Approach to Challenges and Opportunities for Eliminating Aging. Current Aging Science, 2014, 7, 54-59.	0.4	5
100	The death spiral: predicting death in Drosophila cohorts. Biogerontology, 2016, 17, 805-816.	2.0	5
101	Metabolic Aspects of the Trade-Off between Fecundity and Longevity in Drosophila melanogaster. , 2004, , 145-164.		4
102	The Creation of Methuselah Flies by Laboratory Evolution. , 2004, , 3-9.		4
103	The Great Evolutionary Divide: Two Genomic Systems Biologies of Aging. Interdisciplinary Topics in Gerontology, 2014, 40, 63-73.	3.6	4
104	Four steps toward the control of aging: following the example of infectious disease. Biogerontology, 2016, 17, 21-31.	2.0	4
105	THE EVOLUTION OF DEVELOPMENT IN DROSOPHILA MELANOGASTER SELECTED FOR POSTPONED SENESCENCE. , 2004, , 370-389.		3
106	Patterns of physiological decline due to age and selection inDrosophila melanogaster. Evolution; International Journal of Organic Evolution, 2016, 70, 2550-2561.	1.1	3
107	An Evolutionary Analysis of Healthspan Extension Using Diet: Have We Come to the End of the Ponce de Leon Trail?. Healthy Ageing and Longevity, 2015, , 265-283.	0.2	3
108	CONVERGENCE TO A NOVEL ENVIRONMENT: COMPARATIVE METHOD VERSUS EXPERIMENTAL EVOLUTION. Evolution; International Journal of Organic Evolution, 2004, 58, 1503.	1.1	2

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109	Reverse Evolution of Aging. , 2004, , 251-254.		2
110	Research in the Biology of Ageing. Ageing and Society, 1997, 17, 65-74.	1.2	1
111	Once more with feeling. Journal of Evolutionary Biology, 2001, 14, 519-519.	0.8	1
112	Reproduction, Nutrition, and Aging. , 2004, , 117-121.		1
113	The evolution of death: why we are aging longer, by Stanley Shostak. Evolution & Development, 2007, 9, 203-204.	1.1	1
114	Gods Inside. , 0, , 279-287.		1
115	An Evolutionary Analysis of Health. Healthy Ageing and Longevity, 2020, , 13-34.	0.2	1
116	Evolution and Physiology: Evolutionary Genetics and Environmental Stress . Ary A. Hoffmann and Peter A. Parsons. Oxford University Press, New York, 1991. X, 284 pp., illus. $75.. Science, 1991, 254, 448-448.	6.0	1
117	David W. E. Smith, Human Longevity, Oxford University Press, New York and Oxford, 1993, 175 pp., Â£27.50, ISBN 0 195 08313 X.. Ageing and Society, 1994, 14, 641-642.	1.2	0
118	Quantitative Genetics of Postponed Aging in Drosophila melanogaster. I. Analysis of Outbred Populations. , 2004, , 17-25.		0
119	EVOLUTIONARY PATTERNS AMONG MEASURES OF AGING. , 2004, , 40-49.		0
120	Increasing Stress Resistance Often Postpones Aging. , 2004, , 53-57.		0
121	SELECTION ON STRESS RESISTANCE INCREASES LONGEVITY IN DROSOPHILA MELANOGASTER. , 2004, , 68-77.		0
122	Metabolic Reserves and Evolved Stress Resistance in Drosophila melanogaster. , 2004, , 78-88.		0
123	Two-dimensional protein electrophoretic analysis of postponed aging in Drosophila. , 2004, , 205-220.		0
124	Variation in the reversibility of evolution. , 2004, , 283-285.		0
125	Aging, Development, and Crowding. , 2004, , 355-358.		0
126	EXPERIMENTAL EVOLUTION OF ACCELERATED DEVELOPMENT IN DROSOPHILA. 1. DEVELOPMENTAL SPEED AND LARVAL SURVIVAL. , 2004, , 390-405.		0

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127	LABORATORY EVOLUTION OF POSTPONED SENESCENCE IN DROSOPHILA MELANOGASTER. , 2004, , 10-16.		0
128	Ageing: life begins at 90. New Scientist, 2011, 211, 42-45.	0.0	0
129	A Hamiltonian Demography of Life History. , 0, , 40-55.		0
130	Notes Toward an Evolutionary Biology of Nutrition. Healthy Ageing and Longevity, 2021, , 123-151.	0.2	0
131	ALLOZYMIC DIFFERENTIATION IN RESPONSE TO LABORATORY DEMOGRAPHIC SELECTION OF DROSOPHILA MELANOGASTER. , 2004, , 221-228.		0
132	The effect of superoxide dismutase alleles on aging in Drosophila. , 2004, , 198-204.		0
133	Increased hsp22 RNA Levels in Drosophila Lines Genetically Selected for Increased Longevity. , 2004, , 229-236.		0
134	Evolution and Physiology: Evolutionary Genetics and Environmental Stress . Ary A. Hoffmann and Peter A. Parsons. Oxford University Press, New York, 1991. X, 284 pp., illus. $75.. Science, 1991, 254, 448-448.	6.0	0