W Owen Mcmillan

List of Publications by Year
in descending order

125	7,737	44042	66879
papers	citations	48 h-index	78 g-index

153	153	153	6321
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A large deletion at the cortex locus eliminates butterfly wing patterning. G3: Genes, Genomes, Genetics, 2022, 12, .	0.8	6
2	Rapid radiation in a highly diverse marine environment. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	10
3	Shifting balances in the weighting of sensory modalities are predicted by divergence in brain morphology in incipient species of Heliconius butterflies. Animal Behaviour, 2022, 185, 83-90.	0.8	8
4	Divergence inHeliconiusflight behaviour is associated with local adaptation to different forest structures. Journal of Animal Ecology, 2022, 91, 727-737.	1.3	12
5	The evolution of adult pollen feeding did not alter postembryonic growth in Heliconius butterflies. Ecology and Evolution, 2022, 12, .	0.8	2
6	Effect of the Central American Isthmus on gene flow and divergence of the American crocodile () Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 5	1.1	3
7	Neural divergence and hybrid disruption between ecologically isolatedHeliconiusbutterflies. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	24
8	Phenotypic plasticity in chemical defence of butterflies allows usage of diverse host plants. Biology Letters, 2021, 17, 20200863.	1.0	12
9	Rampant Genome-Wide Admixture across theHeliconiusRadiation. Genome Biology and Evolution, 2021, 13, .	1.1	31
10	Haplotype tagging reveals parallel formation of hybrid races in two butterfly species. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	46
11	Evolutionary and ecological processes influencing chemical defense variation in an aposematic and mimetic Heliconius butterfly. PeerJ, 2021, 9, e11523.	0.9	7
12	Selection and isolation define a heterogeneous divergence landscape between hybridizing Heliconius butterflies. Evolution; International Journal of Organic Evolution, 2021, 75, 2251-2268.	1.1	18
13	Cortex cis-regulatory switches establish scale colour identity and pattern diversity in Heliconius. ELife, 2021, 10, .	2.8	40
14	Natural experiments and long-term monitoring are critical to understand and predict marine hostâ€“microbe ecology and evolution. PLoS Biology, 2021, 19, e3001322.	2.6	17
15	A novel terpene synthase controls differences in anti-aphrodisiac pheromone production between closely related Heliconius butterflies. PLoS Biology, 2021, 19, e3001022.	2.6	29
16	Clustering of loci controlling species differences in male chemical bouquets of sympatric Heliconius butterflies. Ecology and Evolution, 2021, 11, 89-107.	0.8	9
17	Balanced polymorphisms and their divergence in a Heliconius butterfly. Ecology and Evolution, 2021, 11, 18319-18330.	0.8	1
18	A major locus controls a biologically active pheromone component in Heliconius melpomene. Evolution; International Journal of Organic Evolution, 2020, 74, 349-364.	1.1	19

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19	Heliconius Butterflies Host Characteristic and Phylogenetically Structured Adult-Stage Microbiomes. Applied and Environmental Microbiology, 2020, 86, .	1.4	19
20	From Patterning Genes to Process: Unraveling the Gene Regulatory Networks That Pattern Heliconius Wings. Frontiers in Ecology and Evolution, 2020, 8, .	1.1	22
21	Visual mate preference evolution during butterfly speciation is linked to neural processing genes. Nature Communications, 2020, 11, 4763.	5.8	24
22	Aggressive mimicry in a coral reef fish: The prey's view. Ecology and Evolution, 2020, 10, 12990-13010.	0.8	3
23	Developmental plasticity shapes social traits and selection in a facultatively eusocial bee. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 13615-13625.	3.3	37
24	Divergence of chemosensing during the early stages of speciation. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 16438-16447.	3.3	25
25	Species specificity and intraspecific variation in the chemical profiles of Heliconius butterflies across a large geographic range. Ecology and Evolution, 2020, 10, 3895-3918.	0.8	31
26	An early female lethal system of the New World screwworm, Cochliomyia hominivorax, for biotechnology-enhanced SIT. BMC Genetics, 2020, 21, 143.	2.7	16
27	Conservation and flexibility in the gene regulatory landscape of heliconiine butterfly wings. EvoDevo, 2019, 10, 15.	1.3	22
28	Genomic architecture and introgression shape a butterfly radiation. Science, 2019, 366, 594-599.	6.0	365
29	Comparative Transcriptomics Provides Insights into Reticulate and Adaptive Evolution of a Butterfly Radiation. Genome Biology and Evolution, 2019, 11, 2963-2975.	1.1	7
30	Movement of a Heliconius hybrid zone over 30Âyears: A Bayesian approach. Journal of Evolutionary Biology, 2019, 32, 974-983.	0.8	11
31	The evolution of microendemism in a reef fish (Hypoplectrus maya). Molecular Ecology, 2019, 28, 2872-2885.	2.0	10
32	Inter-chromosomal coupling between vision and pigmentation genes during genomic divergence. Nature Ecology and Evolution, 2019, 3, 657-667.	3.4	43
33	Genetic dissection of assortative mating behavior. PLoS Biology, 2019, 17, e2005902.	2.6	79
34	Specific Gene Disruption in the Major Livestock Pests Cochliomyia hominivorax and Lucilia cuprina Using CRISPR/Cas9. G3: Genes, Genomes, Genetics, 2019, 9, 3045-3055.	0.8	32
35	Interplay between Developmental Flexibility and Determinism in the Evolution of Mimetic Heliconius Wing Patterns. Current Biology, 2019, 29, 3996-4009.e4.	1.8	55
36	Male pheromone composition depends on larval but not adult diet in Heliconius melpomene. Ecological Entomology, 2019, 44, 397-405.	1.1	35

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37	Inheritance, distribution and genetic differentiation of a color polymorphism in Panamanian populations of the tortoise beetle, Chelymorpha alternans (Coleoptera: Chrysomelidae). Heredity, 2019, 122, 558-569.	1.2	7
38	Patterns of Z chromosome divergence among Heliconius species highlight the importance of historical demography. Molecular Ecology, 2018, 27, 3852-3872.	2.0	69
39	Mitogenomic divergence between three pairs of putative geminate fishes from Panama. Mitochondrial DNA Part B: Resources, 2018, 3, 1-5.	0.2	1
40	Environment-dependent attack rates of cryptic and aposematic butterflies. Environmental Epigenetics, 2018, 64, 663-669.	0.9	18
41	patternize: An R package for quantifying colour pattern variation. Methods in Ecology and Evolution, 2018, 9, 390-398.	2.2	96
42	The appearance of mimetic Heliconius butterflies to predators and conspecifics. Evolution; International Journal of Organic Evolution, 2018, 72, 2156-2166.	1.1	33
43	Maternal invasion history of Aedes aegypti and Aedes albopictus into the Isthmus of Panama: Implications for the control of emergent viral disease agents. PLoS ONE, 2018, 13, e0194874.	1.1	28
44	Conserved microbiota among young Heliconius butterfly species. PeerJ, 2018, 6, e5502.	0.9	25
45	Complex modular architecture around a simple toolkit of wing pattern genes. Nature Ecology and Evolution, 2017, 1, 52.	3.4	179
46	A new subspecies in a Heliconius butterfly adaptive radiation (Lepidoptera: Nymphalidae). Zoological Journal of the Linnean Society, 2017, 180, 805-818.	1.0	11
47	Macroevolutionary shifts of WntA function potentiate butterfly wing-pattern diversity. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 10701-10706.	3.3	137
48	Carrion flyâ€derived <scp>DNA</scp> metabarcoding is an effective tool for mammal surveys: Evidence from a known tropical mammal community. Molecular Ecology Resources, 2017, 17, e133-e145.	2.2	60
49	No evidence for maintenance of a sympatricHeliconiusspecies barrier by chromosomal inversions. Evolution Letters, 2017, 1, 138-154.	1.6	90
50	Evolution of novel mimicry rings facilitated by adaptive introgression in tropical butterflies. Molecular Ecology, 2017, 26, 5160-5172.	2.0	70
51	Complete mitochondrial genomes of three Neotropical sleeper gobies: Eleotris amblyopsis, E. picta and Hemieleotris latifasciata (Gobiiformes: Eleotridae). Mitochondrial DNA Part B: Resources, 2017, 2, 747-750.	0.2	4
52	Estimating the age ofHeliconiusbutterflies from calibrated photographs. PeerJ, 2017, 5, e3821.	0.9	4
53	Male sex pheromone components in Heliconius butterflies released by the androconia affect female choice. PeerJ, 2017, 5, e3953.	0.9	79
54	Complete mitochondrial genomes of the New World jacanas:Jacana spinosaandJacana jacana. Mitochondrial DNA, 2016, 27, 764-765.	0.6	7

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55	Extreme sequence divergence between mitochondrial genomes of two subspecies of White-breasted Wood-wren (Henicorhina leucosticta,Cabanis, 1847) from western and central PanamÃ¡. Mitochondrial DNA, 2016, 27, 956-957.	0.6	9
56	A transgenic male-only strain of the New World screwworm for an improved control program using the sterile insect technique. BMC Biology, 2016, 14, 72.	1.7	66
57	Natural Selection and Genetic Diversity in the Butterfly Heliconius melpomene. Genetics, 2016, 203, 525-541.	1.2	94
58	Population genomics of local adaptation versus speciation in coral reef fishes (Hypoplectrus spp,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.8	30
59	The gene cortex controls mimicry and crypsis in butterflies and moths. Nature, 2016, 534, 106-110.	13.7	212
60	Mitochondrial genome organization of the Ochre-bellied Flycatcher,Mionectes oleagineus. Mitochondrial DNA, 2016, 27, 890-891.	0.6	3
61	Genomics at the evolving species boundary. Current Opinion in Insect Science, 2016, 13, 7-15.	2.2	9
62	Extreme mitogenomic divergence between two syntopic specimens of Arremon aurantiirostris (Aves: Emberizidae) in central Panama suggests possible cryptic species. Mitochondrial DNA Part A: DNA Mapping, Sequencing, and Analysis, 2016, 27, 3451-3453.	0.7	2
63	Evolutionary Novelty in a Butterfly Wing Pattern through Enhancer Shuffling. PLoS Biology, 2016, 14, e1002353.	2.6	136
64	Contrasting demographic history and gene flow patterns of two mangrove species on either side of the C entral A merican I sthmus. Ecology and Evolution, 2015, 5, 3486-3499.	0.8	35
65	Divergence with gene flow across a speciation continuum of Heliconius butterflies. BMC Evolutionary Biology, 2015, 15, 204.	3.2	38
66	Conservatism and novelty in the genetic architecture of adaptation in Heliconius butterflies. Heredity, 2015, 114, 515-524.	1.2	50
67	Population genomics of parallel hybrid zones in the mimetic butterflies, H. melpomene and H. erato. Genome Research, 2014, 24, 1316-1333.	2.4	114
68	Genomic atolls of differentiation in coral reef fishes (<scp>H</scp>ypoplectrus spp.,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 222 T	2.0	50
69	Phylogeography of Heliconius cydno and its closest relatives: disentangling their origin and diversification. Molecular Ecology, 2014, 23, 4137-4152.	2.0	21
70	The Genomics of an Adaptive Radiation: Insights Across the Heliconius Speciation Continuum. Advances in Experimental Medicine and Biology, 2014, 781, 249-271.	0.8	20
71	Metamorphosis of a Butterfly-Associated Bacterial Community. PLoS ONE, 2014, 9, e86995.	1.1	144
72	Genomic architecture of adaptive color pattern divergence and convergence in Heliconius butterflies. Genome Research, 2013, 23, 1248-1257.	2.4	72

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73	Multi-Allelic Major Effect Genes Interact with Minor Effect QTLs to Control Adaptive Color Pattern Variation in Heliconius erato. PLoS ONE, 2013, 8, e57033.	1.1	38
74	Diversification of complex butterfly wing patterns by repeated regulatory evolution of a Wnt ligand. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 12632-12637.	3.3	244
75	On the spatial scale of dispersal in coral reef fishes. Molecular Ecology, 2012, 21, 5675-5688.	2.0	62
76	Sharp genetic discontinuity across a unimodal Heliconius hybrid zone. Molecular Ecology, 2012, 21, 5778-5794.	2.0	19
77	Transcriptome analysis reveals novel patterning and pigmentation genes underlying Heliconius butterfly wing pattern variation. BMC Genomics, 2012, 13, 288.	1.2	56
78	Adaptive Introgression across Species Boundaries in Heliconius Butterflies. PLoS Genetics, 2012, 8, e1002752.	1.5	319
79	Partial Complementarity of the Mimetic Yellow Bar Phenotype in Heliconius Butterflies. PLoS ONE, 2012, 7, e48627.	1.1	7
80	optix Drives the Repeated Convergent Evolution of Butterfly Wing Pattern Mimicry. Science, 2011, 333, 1137-1141.	6.0	431
81	Wing patterning gene redefines the mimetic history of Heliconius butterflies. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 19666-19671.	3.3	104
82	MATE PREFERENCE ACROSS THE SPECIATION CONTINUUM IN A CLADE OF MIMETIC BUTTERFLIES. Evolution; International Journal of Organic Evolution, 2011, 65, 1489-1500.	1.1	101
83	Dissecting comimetic radiations inHeliconiusreveals divergent histories of convergent butterflies. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 7365-7370.	3.3	47
84	Genomic Hotspots for Adaptation: The Population Genetics of MÃ¼llerian Mimicry in Heliconius erato. PLoS Genetics, 2010, 6, e1000796.	1.5	99
85	Genomic Hotspots for Adaptation: The Population Genetics of MÃ¼llerian Mimicry in the Heliconius melpomene Clade. PLoS Genetics, 2010, 6, e1000794.	1.5	97
86	Hybridization and introgression in New World red mangroves,Rhizophora(Rhizophoraceae). American Journal of Botany, 2010, 97, 945-957.	0.8	52
87	Spatial Ecology of the Endangered Mona Island Iguana Cyclura cornuta stejnegeri: Does Territorial Behavior Regulate Density?. Herpetological Monographs, 2010, 24, 86-110.	1.1	12
88	Development and characterization of 11 microsatellite loci for the Mona Island iguana (Cyclura) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	2.2	12
89	Butterfly genomics eclosing. Heredity, 2008, 100, 150-157.	1.2	60
90	Dispersal, recruitment and migratory behaviour in a hawksbill sea turtle aggregation. Molecular Ecology, 2008, 17, 839-853.	2.0	65

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91	Isolation and characterization of novel microsatellites from the critically endangered hawksbill sea turtle (Eretmochelys imbricata). Molecular Ecology Resources, 2008, 8, 1098-1101.	2.2	8
92	Convergent Evolution in the Genetic Basis of Mul̂llerian Mimicry in Heliconius Butterflies. Genetics, 2008, 180, 1567-1577.	1.2	79
93	Gene expression underlying adaptive variation inHeliconiuswing patterns: non-modular regulation of overlappingcinnabarandvermilionprepatterns. Proceedings of the Royal Society B: Biological Sciences, 2008, 275, 37-46.	1.2	82
94	Sex-specific migration patterns of hawksbill turtles breeding at Mona Island, Puerto Rico. Endangered Species Research, 2008, 4, 85-94.	1.2	86
95	ButterflyBase: a platform for lepidopteran genomics. Nucleic Acids Research, 2007, 36, D582-D587.	6.5	90
96	Spatial ecology of the Mona Island iguana Cyclura cornuta stejnegeri in an undisturbed environment. Applied Herpetology, 2007, 4, 347-355.	0.5	9
97	A Conserved Supergene Locus Controls Colour Pattern Diversity in Heliconius Butterflies. PLoS Biology, 2006, 4, e303.	2.6	242
98	Polyphyly and gene flow between non-sibling Heliconius species. BMC Biology, 2006, 4, 11.	1.7	113
99	Development of six microsatellite loci for black mangrove (Avicennia germinans). Molecular Ecology Notes, 2006, 6, 692-694.	1.7	17
100	New microsatellite resources for groupers (Serranidae). Molecular Ecology Notes, 2006, 6, 813-817.	1.7	21
101	Heliconius wing patterns: an evo-devo model for understanding phenotypic diversity. Heredity, 2006, 97, 157-167.	1.2	100
102	The influence of spatial scale on the genetic structure of a widespread tropical wetland tree, Pterocarpus officinalis (Fabaceae). Conservation Genetics, 2006, 7, 251-266.	0.8	16
103	Molecular evolution of dengue 2 virus in Puerto Rico: positive selection in the viral envelope accompanies clade reintroduction. Journal of General Virology, 2006, 87, 885-893.	1.3	105
104	Localization of Mul̂llerian Mimicry Genes on a Dense Linkage Map of Heliconius erato. Genetics, 2006, 173, 735-757.	1.2	53
105	Genomic tools and cDNA derived markers for butterflies. Molecular Ecology, 2005, 14, 2883-2897.	2.0	37
106	First-generation linkage map of the warningly colored butterfly Heliconius erato. Heredity, 2005, 94, 408-417.	1.2	58
107	A Genetic Linkage Map of the Mimetic Butterfly Heliconius melpomene. Genetics, 2005, 171, 557-570.	1.2	111
108	Historical demography of Mullerian mimicry in the neotropical Heliconius butterflies. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 9704-9709.	3.3	90

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109	Phylogeography and molecular evolution of dengue 2 in the Caribbean basin, 1981â€“2000. Virology, 2004, 324, 48-59.	1.1	52
110	Molecular evolution and phylogeny of dengue type 4 virus in the caribbean. Virology, 2003, 306, 126-134.	1.1	44
111	Genetic mosaic in a marine species flock. Molecular Ecology, 2003, 12, 2963-2973.	2.0	75
112	Selection-Driven Evolution of Emergent Dengue Virus. Molecular Biology and Evolution, 2003, 20, 1650-1658.	3.5	168
113	Phylogenetic Discordance at the Species Boundary: Comparative Gene Genealogies Among Rapidly Radiating Heliconius Butterflies. Molecular Biology and Evolution, 2002, 19, 2176-2190.	3.5	156
114	Development and evolution on the wing. Trends in Ecology and Evolution, 2002, 17, 125-133.	4.2	122
115	Patterns of genetic diversity and biogeographical history of the tropical wetland tree, Pterocarpus officinalis (Jacq.), in the Caribbean basin. Molecular Ecology, 2002, 11, 675-683.	2.0	48
116	Characterization of microsatellite loci in neotropical Heliconius butterflies. Molecular Ecology Notes, 2002, 2, 398-401.	1.7	31
117	Behavioral and Physiological Differences between Two Parapatric Heliconius Species1. Biotropica, 1999, 31, 661-668.	0.8	17
118	COLOR PATTERN EVOLUTION, ASSORTATIVE MATING, AND GENETIC DIFFERENTIATION IN BRIGHTLY COLORED BUTTERFLYFISHES (CHAETODONTIDAE). Evolution; International Journal of Organic Evolution, 1999, 53, 247-260.	1.1	126
119	ESTIMATING THE MATING BEHAVIOR OF A PAIR OF HYBRIDIZING HELICONIUS SPECIES IN THE WILD. Evolution; International Journal of Organic Evolution, 1998, 52, 503-510.	1.1	32
120	Estimating the Mating Behavior of a Pair of Hybridizing Heliconius Species in the Wild. Evolution; International Journal of Organic Evolution, 1998, 52, 503.	1.1	21
121	What initiates speciation in passion-vine butterflies?. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 8628-8633.	3.3	150
122	The genetic basis of an adaptive radiation: warning colour in two Heliconius species. Proceedings of the Royal Society B: Biological Sciences, 1997, 264, 1167-1175.	1.2	78
123	Rapid Rate of Control-Region Evolution in Pacific Butterflyfishes (Chaetodontidae). Journal of Molecular Evolution, 1997, 45, 473-484.	0.8	106
124	Evolution: Mimicry meets the mitochondrion. Current Biology, 1996, 6, 937-940.	1.8	35
125	What can hybrid zones tell us about speciation? The case ofHeliconius eratoandH. himera(Lepidoptera: Nymphalidae). Biological Journal of the Linnean Society, 1996, 59, 221-242.	0.7	76