J. William O. Ballard

List of Publications by Year
in descending order

127	9,170	76196	42291
papers	citations	40	92
		h-index	g-index

134	134	134	10081
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The incomplete natural history of mitochondria. Molecular Ecology, 2004, 13, 729-744.	2.0	1,767
2	Lifespan and reproduction in Drosophila : New insights from nutritional geometry. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 2498-2503.	3.3	887
3	Seaglider: a long-range autonomous underwater vehicle for oceanographic research. IEEE Journal of Oceanic Engineering, 2001, 26, 424-436.	2.1	841
4	The Ratio of Macronutrients, Not Caloric Intake, Dictates Cardiometabolic Health, Aging, and Longevity in Ad Libitum-Fed Mice. Cell Metabolism, 2014, 19, 418-430.	7.2	768
5	The Population Biology of Mitochondrial DNA and Its Phylogenetic Implications. Annual Review of Ecology, Evolution, and Systematics, 2005, 36, 621-642.	3.8	292
6	Is mitochondrial DNA a strictly neutral marker?. Trends in Ecology and Evolution, 1995, 10, 485-488.	4.2	236
7	Macronutrient balance, reproductive function, and lifespan in aging mice. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 3481-3486.	3.3	194
8	Comparative Genomics of Mitochondrial DNA in Members of the Drosophila melanogaster Subgroup. Journal of Molecular Evolution, 2000, 51, 48-63.	0.8	185
9	Comparative Genomics of Mitochondrial DNA in Drosophila simulans. Journal of Molecular Evolution, 2000, 51, 64-75.	0.8	180
10	Phylogeny of Metarhizium: analysis of ribosomal DNA sequence data. Mycological Research, 1994, 98, 547-552.	2.5	152
11	Linking the mitochondrial genotype to the organismal phenotype. Molecular Ecology, 2010, 19, 1523-1539.	2.0	133
12	When One Is Not Enough: Introgression of Mitochondrial DNA in Drosophila. Molecular Biology and Evolution, 2000, 17, 1126-1130.	3.5	121
13	DIVERGENCE OF MITOCHONDRIAL DNA IS NOT CORROBORATED BY NUCLEAR DNA, MORPHOLOGY, OR BEHAVIOR IN DROSOPHILA SIMULANS. Evolution; International Journal of Organic Evolution, 2002, 56, 527-545.	1.1	119
14	Mitochondrial Genotype Affects Fitness in Drosophila simulans. Genetics, 2003, 164, 187-194.	1.2	115
15	EXPRESSION OF CYTOPLASMIC INCOMPATIBILITY IN DROSOPHILA SIMULANS AND ITS IMPACT ON INFECTION FREQUENCIES AND DISTRIBUTION OF WOLBACHIA PIPIENTIS. Evolution; International Journal of Organic Evolution, 2000, 54, 1661-1672.	1.1	111
16	Review: Quantifying Mitochondrial Dysfunction in Complex Diseases of Aging. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2012, 67, 1022-1035.	1.7	111
17	Mitochondrial <scp>DNA</scp>: more than an evolutionary bystander. Functional Ecology, 2014, 28, 218-231.	1.7	111
18	Wolbachia Associations with Insects: Winning or Losing Against a Master Manipulator. Frontiers in Ecology and Evolution, 2016, 3, .	1.1	99

#	Article	IF	Citations
19	Tetracycline treatment influences mitochondrial metabolism and mtDNA density two generations after treatment in Drosophila. Insect Molecular Biology, 2007, 16, 799-802.	1.0	98
20	MITOCHONDRIAL DNA VARIATION IS ASSOCIATED WITH MEASURABLE DIFFERENCES IN LIFE-HISTORY TRAITS AND MITOCHONDRIAL METABOLISM IN DROSOPHILA SIMULANS. Evolution; International Journal of Organic Evolution, 2007, 61, 1735-1747.	1.1	94
21	Starvation resistance is positively correlated with body lipid proportion in five wild caught Drosophila simulans populations. Journal of Insect Physiology, 2008, 54, 1371-1376.	0.9	84
22	NATURALLY OCCURRING MITOCHONDRIAL DNA HAPLOTYPES EXHIBIT METABOLIC DIFFERENCES: INSIGHT INTO FUNCTIONAL PROPERTIES OF MITOCHONDRIA. Evolution; International Journal of Organic Evolution, 2012, 66, 3189-3197.	1.1	79
23	Factors affecting mitochondrial DNA quality from museum preserved Drosophila simulans. Entomologia Experimentalis Et Applicata, 2001, 98, 279-283.	0.7	71
24	Thermal sensitivity of mitochondrial metabolism in two distinct mitotypes ofDrosophila simulans: evaluation of mitochondrial plasticity. Journal of Experimental Biology, 2010, 213, 1665-1675.	0.8	71
25	Uptake and mitochondrial dysfunction of alpha-synuclein in human astrocytes, cortical neurons and fibroblasts. Translational Neurodegeneration, 2013, 2, 20.	3.6	71
26	Sequential Evolution of a Symbiont Inferred From the Host: Wolbachia and Drosophila simulans. Molecular Biology and Evolution, 2003, 21, 428-442.	3.5	70
27	Diet adaptation in dog reflects spread of prehistoric agriculture. Heredity, 2016, 117, 301-306.	1.2	70
28	Mitochondria, the gut microbiome and ROS. Cellular Signalling, 2020, 75, 109737.	1.7	65
29	Linking phylogenetics with population genetics to reconstruct the geographic origin of a species. Molecular Phylogenetics and Evolution, 2004, 32, 998-1009.	1.2	64
30	Influence of Two Wolbachia Strains on Population Structure of East African Drosophila simulans. Genetics, 2003, 165, 1959-1969.	1.2	64
31	Paternal transmission of mitochondrial DNA as an integral part of mitochondrial inheritance in metapopulations of Drosophila simulans. Heredity, 2013, 110, 57-62.	1.2	63
32	Thermal sensitivity of mitochondrial functions in permeabilized muscle fibers from two populations of Drosophila simulans with divergent mitotypes. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2011, 301, R48-R59.	0.9	59
33	Mitochondrial DNA variants influence mitochondrial bioenergetics in Drosophila melanogaster. Mitochondrion, 2012, 12, 459-464.	1.6	53
34	The mechanisms mediating the antiepileptic effects of the ketogenic diet, and potential opportunities for improvement with metabolism-altering drugs. Seizure: the Journal of the British Epilepsy Association, 2017, 52, 15-19.	0.9	51
35	Dynamics of double and single Wolbachia infections in Drosophila simulans from New Caledonia. Heredity, 2002, 88, 182-189.	1.2	48
36	Canfam_GSD: De novo chromosome-length genome assembly of the German Shepherd Dog (Canis lupus) Tj ETQq0 0 0 rgBT /Overlock 1	3.3	47

#	Article	IF	Citations
37	Genotype to phenotype: Diet-by-mitochondrial DNA haplotype interactions drive metabolic flexibility and organismal fitness. PLoS Genetics, 2018, 14, e1007735.	1.5	46
38	The mitochondrial genome: mutation, selection and recombination. Current Opinion in Genetics and Development, 2001, 11, 667-672.	1.5	45
39	Sex differences in survival and mitochondrial bioenergetics during aging inDrosophila. Aging Cell, 2007, 6, 699-708.	3.0	45
40	Liver Aging and Pseudocapillarization in a Werner Syndrome Mouse Model. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2014, 69, 1076-1086.	1.7	45
41	Intraspecific variation in survival and mitochondrial oxidative phosphorylation in wild-caught Drosophila simulans. Aging Cell, 2006, 5, 225-233.	3.0	44
42	Diet influences the intake target and mitochondrial functions of Drosophila melanogaster males. Mitochondrion, 2013, 13, 817-822.	1.6	42
43	Data Sets, Partitions, and Characters: Philosophies and Procedures for Analyzing Multiple Data Sets. Systematic Biology, 1998, 47, 367-396.	2.7	39
44	Mitochondrial haplotype divergences affect specific temperature sensitivity of mitochondrial respiration. Journal of Bioenergetics and Biomembranes, 2013, 45, 25-35.	1.0	39
45	What maintains noncytoplasmic incompatibility inducingWolbachiain their hosts: a case study from a naturalDrosophila yakubapopulation. Journal of Evolutionary Biology, 2004, 17, 322-330.	0.8	37
46	Regulation of Mitochondrial Genome Inheritance by Autophagy and Ubiquitin-Proteasome System: Implications for Health, Fitness, and Fertility. BioMed Research International, 2014, 2014, 1-16.	0.9	37
47	Differential fitness of mitochondrial DNA in perturbation cage studies correlates with global abundance and population history in Drosophila simulans. Proceedings of the Royal Society B: Biological Sciences, 2004, 271, 1197-1201.	1.2	36
48	Sympatric Drosophila simulans flies with distinct mtDNA show difference in mitochondrial respiration and electron transport. Insect Biochemistry and Molecular Biology, 2007, 37, 213-222.	1.2	36
49	Using Near-Infrared Spectroscopy to Resolve the Species, Gender, Age, and the Presence of Wolbachia Infection in Laboratory-Reared Drosophila. G3: Genes, Genomes, Genetics, 2012, 2, 1057-1065.	0.8	34
50	Conservation implications for dingoes from the maternal and paternal genome: Multiple populations, dog introgression, and demography. Ecology and Evolution, 2017, 7, 9787-9807.	0.8	33
51	Wolbachia gonadal density in female and male Drosophila vary with laboratory adaptation and respond differently to physiological and environmental challenges. Journal of Invertebrate Pathology, 2012, 111, 197-204.	1.5	32
52	Epigallocatechin-3-gallate induces oxidative phosphorylation by activating cytochrome c oxidase in human cultured neurons and astrocytes. Oncotarget, 2016, 7, 7426-7440.	0.8	32
53	Selective Enrichment and Sequencing of Whole Mitochondrial Genomes in the Presence of Nuclear Encoded Mitochondrial Pseudogenes (Numts). PLoS ONE, 2012, 7, e37142.	1.1	31
54	Sex-specific influences of mtDNA mitotype and diet on mitochondrial functions and physiological traits in Drosophila melanogaster. PLoS ONE, 2017, 12, e0187554.	1.1	31

#	Article	IF	Citations
55	The Influence of Macronutrients on Splanchnic and Hepatic Lymphocytes in Aging Mice. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2015, 70, 1499-1507.	1.7	30
56	as a novel model for studying mitochondrial metabolism and aging. Experimental Gerontology, 2005, 40, 763-773.	1.2	28
57	Working harder to stay alive: Metabolic rate increases with age in Drosophila simulans but does not correlate with life span. Journal of Insect Physiology, 2007, 53, 1300-1306.	0.9	27
58	Review: can diet influence the selective advantage of mitochondrial DNA haplotypes?. Bioscience Reports, 2015, 35, .	1.1	26
59	Alpha-Synuclein Transmission and Mitochondrial Toxicity in Primary Human Foetal Enteric Neurons In Vitro. Neurotoxicity Research, 2014, 25, 170-182.	1.3	25
60	The Relationship Between Dietary Macronutrients and Hepatic Telomere Length in Aging Mice. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2018, 73, 446-449.	1.7	25
61	Length Differences and Topology-dependent Tests: a Response to KÃllersjÃ¶ et al.. Cladistics, 1994, 10, 57-64.	1.5	24
62	Distributional Evidence for Cospeciation between Neotropical Bats and their Bat Fly Ectoparasites. Studies on Neotropical Fauna and Environment, 1998, 33, 76-84.	0.5	24
63	Elucidating biogeographical patterns in Australian native canids using genome wide SNPs. PLoS ONE, 2018, 13, e0198754.	1.1	22
64	The Australian dingo: untamed or feral?. Frontiers in Zoology, 2019, 16, 2.	0.9	22
65	Chromosome-length genome assembly and structural variations of the primal Basenji dog (Canis lupus) Tj ETQq1 1 0.784314 rgBT /O	1.2	22
66	A long-term investigation of the HF communication channel over middle- and high-latitude paths. Radio Science, 1997, 32, 1705-1715.	0.8	21
67	A Candidate Complex Approach to Study Functional Mitochondrial DNA Changes: Sequence Variation and Quaternary Structure Modeling of Drosophila simulans Cytochrome c Oxidase. Journal of Molecular Evolution, 2008, 66, 232-242.	0.8	20
68	Mitochondrial DNA variants in Drosophila melanogaster are expressed at the level of the organismal phenotype. Mitochondrion, 2011, 11, 756-763.	1.6	20
69	EXPRESSION OF CYTOPLASMIC INCOMPATIBILITY IN DROSOPHILA SIMULANS AND ITS IMPACT ON INFECTION FREQUENCIES AND DISTRIBUTION OF WOLBACHIA PIPIENTIS. Evolution; International Journal of Organic Evolution, 2000, 54, 1661.	1.1	17
70	High divergence among Drosophila simulans mitochondrial haplogroups arose in midst of long term purifying selection. Molecular Phylogenetics and Evolution, 2005, 36, 328-337.	1.2	17
71	Cellular and population level processes influence the rate, accumulation and observed frequency of inherited and somatic mtDNA mutations. Mutagenesis, 2017, 32, 323-334.	1.0	17
72	Molecular systematics, morphological analysis, and hybrid crossing identify a third taxon, Aedes (Halaedes) wardangensis sp.nov., of the Aedes (Halaedes) australis species-group (Diptera: Culicidae). Canadian Journal of Zoology, 1998, 76, 1236-1246.	0.4	16

#	Article	IF	Citations
73	Physiological adaptations to reproduction II. Mitochondrial adjustments in livers of lactating mice. Journal of Experimental Biology, 2013, 216, 2889-95.	0.8	16
74	Seasonal trade-off between starvation resistance and cold resistance in temperate wild-caught Drosophila simulans. Australian Journal of Entomology, 2008, 47, 20-23.	1.1	15
75	Genetic and life-history trait variation of the amphipod Melita plumulosa from polluted and unpolluted waterways in eastern Australia. Science of the Total Environment, 2008, 403, 222-229.	3.9	15
76	Dietary Macronutrient Management to Treat Mitochondrial Dysfunction in Parkinsonâ€™s Disease. International Journal of Molecular Sciences, 2019, 20, 1850.	1.8	15
77	LENGTH DIFFERENCES AND TOPOLOGYâ€ÐEPENDENT TESTS: A RESPONSE TO KÃ„LLERSJÃ– ET AL.. Cladistics, 1994, 10, 57-64.	1.5	14
78	Phylogeography of the medically important mosquito Aedes (Ochlerotatus) vigilax (Diptera: Culicidae) in Australasia. Journal of Biogeography, 2012, 39, 1333-1346.	1.4	14
79	What can symbiont titres tell us about co-evolution of Wolbachia and their host?. Journal of Invertebrate Pathology, 2014, 118, 20-27.	1.5	14
80	The Australian dingo is an early offshoot of modern breed dogs. Science Advances, 2022, 8, eabm5944.	4.7	14
81	Comparative Analysis of Mitochondrial Genotype and Aging. Annals of the New York Academy of Sciences, 2007, 1114, 93-106.	1.8	13
82	Low protein to carbohydrate ratio diet delays onset of Parkinsonism like phenotype in Drosophila melanogaster parkin null mutants. Mechanisms of Ageing and Development, 2016, 160, 19-27.	2.2	13
83	Dietary management and physical exercise can improve climbing defects and mitochondrial activity inDrosophila melanogaster parkinnull mutants. Fly, 2018, 12, 95-104.	0.9	13
84	Nearâ€infrared spectroscopy for metabolite quantification and species identification. Ecology and Evolution, 2019, 9, 1336-1343.	0.8	13
85	Assessing bioenergetic functions from isolated mitochondria in Drosophila melanogaster. Journal of Biological Methods, 2016, 3, e42.	1.0	13
86	What physiological role(s) does the alternative oxidase perform in animals?. Biochimica Et Biophysica Acta - Bioenergetics, 2022, 1863, 148556.	0.5	12
87	Validation of manometric microrespirometers for measuring oxygen consumption in small arthropods. Journal of Insect Physiology, 2008, 54, 1132-1137.	0.9	11
88	Cost of a Naturally Occurring Twoâ€“Amino Acid Deletion in Cytochrome c Oxidase Subunit 7A in Drosophila simulans. American Naturalist, 2010, 176, E98-E108.	1.0	11
89	Drosophila mitotypes determine developmental time in a diet and temperature dependent manner. Journal of Insect Physiology, 2017, 100, 133-139.	0.9	11
90	Sympatric Drosophila simulans flies with distinct mtDNA show age related differences in mitochondrial metabolism. Insect Biochemistry and Molecular Biology, 2007, 37, 923-932.	1.2	10

#	Article	IF	Citations
91	The effects of temperature and diet on age grading and population age structure determination in Drosophila. Journal of Insect Physiology, 2013, 59, 994-1000.	0.9	10
92	Stearic Acid Supplementation in High Protein to Carbohydrate (P:C) Ratio Diet Improves Physiological and Mitochondrial Functions of Drosophila melanogaster parkin Null Mutants. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2019, 74, 1564-1572.	1.7	10
93	The Effects of Dietary Macronutrient Balance on Skin Structure in Aging Male and Female Mice. PLoS ONE, 2016, 11, e0166175.	1.1	10
94	Factors influencing silhouette-trap captures of the blackfly Austrosimulium bancrofti (Taylor) (Diptera: Simuliidae) in the Australian Capital Territory. Bulletin of Entomological Research, 1989, 79, 421-428.	0.5	9
95	DIVERGENCE OF MITOCHONDRIAL DNA IS NOT CORROBORATED BY NUCLEAR DNA, MORPHOLOGY, OR BEHAVIOR IN DROSOPHILA SIMULANS. Evolution; International Journal of Organic Evolution, 2002, 56, 527.	1.1	9
96	Phylogenies with Corroboration Assessment. Zootaxa, 2011, 2946, 52.	0.2	9
97	Mitochondrial DNA content of mature spermatozoa and oocytes in the genetic model Drosophila. Cell and Tissue Research, 2013, 353, 195-200.	1.5	9
98	Yin and Yang of mitochondrial ROS in Drosophila. Journal of Insect Physiology, 2020, 122, 104022.	0.9	9
99	Population cytogenetics of Austrosimulium bancrofti (Diptera: Simuliidae) in eastern Australia. Genome, 1991, 34, 338-353.	0.9	8
100	EARLY LIFE BENEFITS AND LATER LIFE COSTS OF A TWO AMINO ACID DELETION INDROSOPHILA SIMULANS. Evolution; International Journal of Organic Evolution, 2011, 65, 1400-1412.	1.1	8
101	Mitotype Interacts With Diet to Influence Longevity, Fitness, and Mitochondrial Functions in Adult Female Drosophila. Frontiers in Genetics, 2018, 9, 593.	1.1	7
102	Proteinâ€"protein interactions of the cytochrome c oxidase DNA barcoding region. Systematic Entomology, 2012, 37, 229-236.	1.7	6
103	Quaternary protein modeling to predict the function of DNA variation found in human mitochondrial cytochrome c oxidase. Journal of Human Genetics, 2013, 58, 127-134.	1.1	6
104	Kidney disease risk factors do not explain impacts of low dietary protein on kidney function and structure. IScience, 2021, 24, 103308.	1.9	6
105	Factors influencing silhouette trap captures of the blackfly Austrosimulium bancrofti in Queensland, Australia. Medical and Veterinary Entomology, 1988, 2, 371-378.	0.7	5
106	Temporal and geographical genetic variation in the amphipod Melita plumulosa (Crustacea: Melitidae): Link of a localized change in haplotype frequencies to a chemical spill. Chemosphere, 2011, 82, 1050-1055.	4.2	5
107	Functional conservatism among Drosophila simulans flies experiencing different thermal regimes and mitochondrial DNA introgression. Journal of Experimental Zoology Part B: Molecular and Developmental Evolution, 2011, 316B, 188-198.	0.6	5
108	Eye contact and sociability data suggests that Australian dingoes were never domesticated. Environmental Epigenetics, 2022, 68, 423-432.	0.9	5

#	Article	IF	Citations
109	Differences in trap-finding behaviour of two populations of Austrosimulium bancrofti (Taylor) (Diptera: Simuliidae) in eastern Australia. Canadian Journal of Zoology, 1990, 68, 579-584.	0.4	4
110	Exogenous Factors May Differentially Influence the Selective Costs of mtDNA Mutations. Advances in Anatomy, Embryology and Cell Biology, 2019, 231, 51-74.	1.0	4
111	Molecular systematics, morphological analysis, and hybrid crossing identify a third taxon, Aedes (Halaedes) wardangensis sp.nov., of the Aedes (Halaedes) australis species-group (Diptera: Culicidae). Canadian Journal of Zoology, 1998, 76, 1236-1246.	0.4	4
112	Evidence from 12S Ribosomal RNA Sequences Resolves a Morphological Conundrum in Austrosimulium (Diptera: Simuliidae). Australian Journal of Entomology, 1994, 33, 131-135.	1.1	3
113	Practical measures for combating communication system impairments caused by large magnetic storms. Radio Science, 2006, 41, n/a-n/a.	0.8	3
114	Evidence of recent population expansion in the field cricket Teleogryllus commodus. Australian Journal of Zoology, 2010, 58, 33.	0.6	3
115	Females With a Mutation in a Nuclear-Encoded Mitochondrial Protein Pay a Higher Cost of Survival Than Do Males in Drosophila. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2011, 66A, 765-770.	1.7	3
116	Differential survival and reproductive performance across three mitochondrial lineages in Melita plumulosa following naphthalene exposure. Chemosphere, 2013, 93, 1064-1069.	4.2	3
117	The impact of historic isolation on the population biogeography ofÂMelita plumulosa (Crustacea:) Tj ETQq1 1 0.784314 rgBT /Overlock	0.9	3
118	10.1023/A:1018963131302. , 2011, , .		3
119	Colonization of perspex strips by larvae of Austrosimulium bancrofti (Taylor) near Ipswich, Queensland. Hydrobiologia, 1991, 218, 255-263.	1.0	2
120	Metabolomics shows the Australian dingo has a unique plasma profile. Scientific Reports, 2021, 11, 5245.	1.6	2
121	Ancestral dietary change alters the development of Drosophila larvae through MAPK signalling. Fly, 2022, 16, 298-310.	0.9	2
122	MONITORING BLACKFLY (DIPTERA: SIMULIIDAE) PESTS. Australian Journal of Entomology, 1992, 31, 263-270.	1.1	1
123	Towards understanding the evolutionary dynamics of mtDNA. Mitochondrial DNA Part A: DNA Mapping, Sequencing, and Analysis, 2020, 31, 355-364.	0.7	1
124	A simple technique for sexing blackfly larvae of the taxon Austrosimulium bancrofti. Transactions of the Royal Society of Tropical Medicine and Hygiene, 1988, 82, 478.	0.7	0
125	Colonization of Perspex Strips by Larvae of Austrosimulium-Bancrofti (Taylor) Near Willawarin, Nsw. Australian Journal of Zoology, 1991, 39, 201.	0.6	0
126	Corroboration assessments and recent progress towards integrative systematics: a reply to Farris and Carpenter. Zootaxa, 2012, 3235, 65.	0.2	0

#	Article	IF	Citations
127	Assessment of temporal genetic variability of two epibenthic amphipod species in an eastern Australian estuarine environment and their suitability as biological monitors. Australian Journal of Zoology, 2014, 62, 206.	0.6	0