David Weetman

List of Publications by Year
in descending order

95 papers	5,225 citations	94433 37 h-index	110387 64 g-index
119 all docs	119 docs citations	119 times ranked	5238 citing authors

#	Article	IF	Citations
1	Contemporary status of insecticide resistance in the major Aedes vectors of arboviruses infecting humans. PLoS Neglected Tropical Diseases, 2017, 11, e0005625.	3.0	504
2	Estimation and adjustment of microsatellite null alleles in nonequilibrium populations. Molecular Ecology Notes, 2006, 6, 255-256.	1.7	265
3	CYP6 P450 Enzymes and ACE-1 Duplication Produce Extreme and Multiple Insecticide Resistance in the Malaria Mosquito Anopheles gambiae. PLoS Genetics, 2014, 10, e1004236.	3.5	243
4	Multiple-Insecticide Resistance in<i>Anopheles gambiae</i>Mosquitoes, Southern CÃ´te dâ€™Ivoire. Emerging Infectious Diseases, 2012, 18, 1508-1511.	4.3	200
5	Footprints of positive selection associated with a mutation (<i>N1575Y</i>) in the voltage-gated sodium channel of <i>Anopheles gambiae</i>. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 6614-6619.	7.1	179
6	Management of insecticide resistance in the major Aedes vectors of arboviruses: Advances and challenges. PLoS Neglected Tropical Diseases, 2019, 13, e0007615.	3.0	162
7	Windborne long-distance migration of malaria mosquitoes in the Sahel. Nature, 2019, 574, 404-408.	27.8	162
8	Aedes Mosquitoes and Aedes-Borne Arboviruses in Africa: Current and Future Threats. International Journal of Environmental Research and Public Health, 2018, 15, 220.	2.6	153
9	Adaptive introgression between Anopheles sibling species eliminates a major genomic island but not reproductive isolation. Nature Communications, 2014, 5, 4248.	12.8	143
10	Does kdr genotype predict insecticide-resistance phenotype in mosquitoes?. Trends in Parasitology, 2009, 25, 213-219.	3.3	138
11	Genetic population structure and contemporary dispersal patterns of a recent European invader, the Chinese mitten crab, Eriocheir sinensis. Molecular Ecology, 2006, 16, 231-242.	3.9	122
12	Concordant Genetic Estimators of Migration Reveal Anthropogenically Enhanced Source-Sink Population Structure in the River Sculpin, Cottus gobio. Genetics, 2006, 173, 1487-1501.	2.9	111
13	Metabolic and Target-Site Mechanisms Combine to Confer Strong DDT Resistance in Anopheles gambiae. PLoS ONE, 2014, 9, e92662.	2.5	102
14	Acetylcholinesterase (Ace-1) target site mutation 119S is strongly diagnostic of carbamate and organophosphate resistance in Anopheles gambiae s.s. and Anopheles coluzzii across southern Ghana. Malaria Journal, 2013, 12, 404.	2.3	90
15	Field, Genetic, and Modeling Approaches Show Strong Positive Selection Acting upon an Insecticide Resistance Mutation in Anopheles gambiae s.s.. Molecular Biology and Evolution, 2010, 27, 1117-1125.	8.9	88
16	Rapid selection of a pyrethroid metabolic enzyme CYP9K1 by operational malaria control activities. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 4619-4624.	7.1	88
17	Identification, Validation, and Application of Molecular Diagnostics for Insecticide Resistance in Malaria Vectors. Trends in Parasitology, 2016, 32, 197-206.	3.3	87
18	Gene Flow-Dependent Genomic Divergence between Anopheles gambiae M and S Forms. Molecular Biology and Evolution, 2012, 29, 279-291.	8.9	79

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19	Whole-genome sequencing reveals high complexity of copy number variation at insecticide resistance loci in malaria mosquitoes. Genome Research, 2019, 29, 1250-1261.	5.5	79
20	Insecticide resistance monitoring of fieldâ€collected <i>Anopheles gambiae s.l</i>. populations from Jinja, eastern Uganda, identifies high levels of pyrethroid resistance. Medical and Veterinary Entomology, 2013, 27, 276-283.	1.5	69
21	Contemporary evolution of resistance at the major insecticide target site gene <i>Aceâ€1</i> by mutation and copy number variation in the malaria mosquito <i>AnophelesÂgambiae</i>. Molecular Ecology, 2015, 24, 2656-2672.	3.9	63
22	Copy number variation (CNV) and insecticide resistance in mosquitoes: evolving knowledge or an evolving problem?. Current Opinion in Insect Science, 2018, 27, 82-88.	4.4	61
23	Combined target site (kdr) mutations play a primary role in highly pyrethroid resistant phenotypes of Aedes aegypti from Saudi Arabia. Parasites and Vectors, 2017, 10, 161.	2.5	60
24	The genetic architecture of targetâ€site resistance to pyrethroid insecticides in the African malaria vectors <i>Anopheles gambiae</i> and <i>Anopheles coluzzii</i>. Molecular Ecology, 2021, 30, 5303-5317.	3.9	59
25	Effects of temperature on anti-predator behaviour in the guppy,Poecilia reticulata. Animal Behaviour, 1998, 55, 1361-1372.	1.9	55
26	Understanding the transmission dynamics of Leishmania donovani to provide robust evidence for interventions to eliminate visceral leishmaniasis in Bihar, India. Parasites and Vectors, 2016, 9, 25.	2.5	55
27	High frequencies of F1534C and V1016I kdr mutations and association with pyrethroid resistance in Aedes aegypti from SomgandÃ© (Ouagadougou), Burkina Faso. Tropical Medicine and Health, 2019, 47, 2.	2.8	53
28	Association Mapping of Insecticide Resistance in Wild Anopheles gambiae Populations: Major Variants Identified in a Low-Linkage Disequilbrium Genome. PLoS ONE, 2010, 5, e13140.	2.5	53
29	Insecticide resistance profile of Anopheles gambiae from a phase II field station in CovÃ©, southern Benin: implications for the evaluation of novel vector control products. Malaria Journal, 2015, 14, 464.	2.3	52
30	Candidate-gene based GWAS identifies reproducible DNA markers for metabolic pyrethroid resistance from standing genetic variation in East African Anopheles gambiae. Scientific Reports, 2018, 8, 2920.	3.3	51
31	Insecticide resistance is mediated by multiple mechanisms in recently introduced Aedes aegypti from Madeira Island (Portugal). PLoS Neglected Tropical Diseases, 2017, 11, e0005799.	3.0	51
32	A cis-regulatory sequence driving metabolic insecticide resistance in mosquitoes: Functional characterisation and signatures of selection. Insect Biochemistry and Molecular Biology, 2012, 42, 699-707.	2.7	50
33	Antipredator reaction norms for life history traits in Daphnia pulex: dependence on temperature and food. Oikos, 2002, 98, 299-307.	2.7	48
34	Evaluation of alternative hypotheses to explain temperature-induced life history shifts in Daphnia. Journal of Plankton Research, 2004, 26, 107-116.	1.8	46
35	Ecological Zones Rather Than Molecular Forms Predict Genetic Differentiation in the Malaria Vector Anopheles gambiae s.s. in Ghana. Genetics, 2007, 175, 751-761.	2.9	46
36	Insecticide resistance levels and mechanisms in Aedes aegypti populations in and around Ouagadougou, Burkina Faso. PLoS Neglected Tropical Diseases, 2019, 13, e0007439.	3.0	46

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37	Associated patterns of insecticide resistance in field populations of malaria vectors across Africa. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 5938-5943.	7.1	45
38	Tracking Insecticide Resistance in Mosquito Vectors of Arboviruses: The Worldwide Insecticide resistance Network (WIN). PLoS Neglected Tropical Diseases, 2016, 10, e0005054.	3.0	43
39	Insecticide resistance in Anopheles gambiae from the northern Democratic Republic of Congo, with extreme knockdown resistance (kdr) mutation frequencies revealed by a new diagnostic assay. Malaria Journal, 2018, 17, 412.	2.3	41
40	A high throughput multi-locus insecticide resistance marker panel for tracking resistance emergence and spread in Anopheles gambiae. Scientific Reports, 2019, 9, 13335.	3.3	41
41	Impacts of Agricultural Practices on Insecticide Resistance in the Malaria Vector Anopheles arabiensis in Khartoum State, Sudan. PLoS ONE, 2013, 8, e80549.	2.5	39
42	Genetic population structure across a range of geographic scales in the commercially exploited marine gastropod Buccinum undatum. Marine Ecology - Progress Series, 2006, 317, 157-169.	1.9	39
43	Water temperature influences the shoaling decisions of guppies, Poecilia reticulata, under predation threat. Animal Behaviour, 1999, 58, 735-741.	1.9	38
44	Invasive Malaria Vector <i>Anopheles stephensi</i> Mosquitoes in Sudan, 2016â€“2018. Emerging Infectious Diseases, 2021, 27, 2952-2954.	4.3	36
45	Genetic basis of pyrethroid resistance in a population of Anopheles arabiensis, the primary malaria vector in Lower Moshi, north-eastern Tanzania. Parasites and Vectors, 2014, 7, 274.	2.5	34
46	Evolution of insecticide resistance diagnostics in malaria vectors. Transactions of the Royal Society of Tropical Medicine and Hygiene, 2015, 109, 291-293.	1.8	34
47	Reconstruction of Microsatellite Mutation History Reveals a Strong and Consistent Deletion Bias in Invasive Clonal Snails, <i>Potamopyrgus antipodarum</i>. Genetics, 2002, 162, 813-822.	2.9	34
48	Resistance to pirimiphos-methyl in West African Anopheles is spreading via duplication and introgression of the Ace1 locus. PLoS Genetics, 2021, 17, e1009253.	3.5	33
49	High, clustered, nucleotide diversity in the genome of Anopheles gambiae revealed through pooled-template sequencing: implications for high-throughput genotyping protocols. BMC Genomics, 2009, 10, 320.	2.8	32
50	Knockdown resistance mutations predict DDT resistance and pyrethroid tolerance in the visceral leishmaniasis vector Phlebotomus argentipes. PLoS Neglected Tropical Diseases, 2017, 11, e0005504.	3.0	32
51	Evidence for a discrete evolutionary lineage within Equatorial Guinea suggests that the tsetse fly<i>Glossina palpalis palpalis</i>exists as a species complex. Molecular Ecology, 2009, 18, 3268-3282.	3.9	31
52	Contemporary gene flow between wild An. gambiae s.s. and An. arabiensis. Parasites and Vectors, 2014, 7, 345.	2.5	31
53	Does insecticide resistance contribute to heterogeneities in malaria transmission in The Gambia?. Malaria Journal, 2016, 15, 166.	2.3	31
54	Evolution of the Insecticide Target Rdl in African Anopheles Is Driven by Interspecific and Interkaryotypic Introgression. Molecular Biology and Evolution, 2020, 37, 2900-2917.	8.9	31

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55	First detection of N1575Y mutation in pyrethroid resistant Anopheles gambiae in Southern CÃ´te dâ€™Ivoire. Wellcome Open Research, 2017, 2, 71.	1.8	31
56	Geographic population structure of the <scp>A</scp>frican malaria vector <i><scp>A</scp>nopheles gambiae</i> suggests a role for the forestâ€savannah biome transition as a barrier to gene flow. Evolutionary Applications, 2013, 6, 910-924.	3.1	29
57	Long-term trends in Anopheles gambiae insecticide resistance in CÃ´te dâ€™Ivoire. Parasites and Vectors, 2014, 7, 500.	2.5	29
58	Massive introgression drives species radiation at the range limit of Anopheles gambiae. Scientific Reports, 2017, 7, 46451.	3.3	28
59	Fine scale spatial investigation of multiple insecticide resistance and underlying target-site and metabolic mechanisms in Anopheles gambiae in central CÃ´te dâ€™Ivoire. Scientific Reports, 2020, 10, 15066.	3.3	28
60	Tracing the origin of the early wetâ€season <i>Anopheles coluzzii</i> in the Sahel. Evolutionary Applications, 2017, 10, 704-717.	3.1	25
61	Discovery of Ongoing Selective Sweeps within<i>Anopheles</i>Mosquito Populations Using Deep Learning. Molecular Biology and Evolution, 2021, 38, 1168-1183.	8.9	25
62	International workshop on insecticide resistance in vectors of arboviruses, December 2016, Rio de Janeiro, Brazil. Parasites and Vectors, 2017, 10, 278.	2.5	23
63	Independence of neutral and adaptive divergence in a low dispersal marine mollusc. Marine Ecology - Progress Series, 2012, 446, 173-187.	1.9	23
64	Characterization of microsatellite loci for the Chinese mitten crab,Eriocheir sinensis. Molecular Ecology Notes, 2003, 3, 15-17.	1.7	21
65	Hierarchical population genetic structure in the commercially exploited shrimp Crangon crangon identified by AFLP analysis. Marine Biology, 2007, 151, 565-575.	1.5	21
66	Isolation and characterization of di- and trinucleotide microsatellites in the freshwater snail Potamopyrgus antipodarum. Molecular Ecology Notes, 2001, 1, 185-187.	1.7	20
67	Review and Meta-Analysis of the Evidence for Choosing between Specific Pyrethroids for Programmatic Purposes. Insects, 2021, 12, 826.	2.2	20
68	Estimation of allele-specific Ace-1 duplication in insecticide-resistant Anopheles mosquitoes from West Africa. Malaria Journal, 2015, 14, 507.	2.3	18
69	Improved spatial ecological sampling using open data and standardization: an example from malaria mosquito surveillance. Journal of the Royal Society Interface, 2019, 16, 20180941.	3.4	17
70	Microsatellite markers for the whelk Buccinum undatum. Molecular Ecology Notes, 2005, 5, 361-362.	1.7	16
71	First report of an exophilic Anopheles arabiensis population in Bissau City, Guinea-Bissau: recent introduction or sampling bias?. Malaria Journal, 2014, 13, 423.	2.3	16
72	Adaptive Potential of Hybridization among Malaria Vectors: Introgression at the Immune Locus TEP1 between Anopheles coluzzii and A. gambiae in â€˜Far-Westâ€™ Africa. PLoS ONE, 2015, 10, e0127804.	2.5	16

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73	Loss of genetic diversity in Culex quinquefasciatus targeted by a lymphatic filariasis vector control program in Recife, Brazil. Transactions of the Royal Society of Tropical Medicine and Hygiene, 2011, 105, 491-499.	1.8	15
74	The last bastion? X chromosome genotyping of <i>Anopheles gambiae</i> species pair males from a hybrid zone reveals complex recombination within the major candidate â€˜genomic island of speciationâ€™. Molecular Ecology, 2016, 25, 5719-5731.	3.9	15
75	Detection and quantification of Anopheles gambiae sensu lato mosquito larvae in experimental aquatic habitats using environmental DNA (eDNA).. Wellcome Open Research, 2018, 3, 26.	1.8	14
76	Identification of a rapidlyâ€spreading triple mutant for highâ€level metabolic insecticide resistance in <i>Anopheles gambiae</i> provides a realâ€time molecular diagnostic for antimalarial intervention deployment. Molecular Ecology, 2022, 31, 4307-4318.	3.9	14
77	Allozyme and AFLP Analyses of Genetic Population Structure in the Hairy Edible Crab Cancer Setosus from the Chilean Coast. Journal of Crustacean Biology, 2003, 23, 486-494.	0.8	13
78	Limited genomic divergence between intraspecific forms of Culex pipiens under different ecological pressures. BMC Evolutionary Biology, 2015, 15, 197.	3.2	12
79	Strain Characterisation for Measuring Bioefficacy of ITNs Treated with Two Active Ingredients (Dual-AI ITNs): Developing a Robust Protocol by Building Consensus. Insects, 2022, 13, 434.	2.2	12
80	Heterogeneous evolution of microsatellites revealed by reconstruction of recent mutation history in an invasive apomictic snail, Potamopyrgus antipodarum. Genetica, 2006, 127, 285-293.	1.1	11
81	High concentrations of membrane-fed ivermectin are required for substantial lethal and sublethal impacts on Aedes aegypti. Parasites and Vectors, 2021, 14, 9.	2.5	11
82	Islands and Stepping-Stones: Comparative Population Structure of Anopheles gambiae sensu stricto and Anopheles arabiensis in Tanzania and Implications for the Spread of Insecticide Resistance. PLoS ONE, 2014, 9, e110910.	2.5	10
83	Accurate determination of DNA yield from individual mosquitoes for population genomic applications. Insect Science, 2009, 16, 361-363.	3.0	8
84	Using sibship reconstructions to understand the relationship between larval habitat productivity and oviposition behaviour in Kenyan Anopheles arabiensis. Malaria Journal, 2019, 18, 286.	2.3	8
85	Modelling spatiotemporal trends in the frequency of genetic mutations conferring insecticide target-site resistance in African mosquito malaria vector species. BMC Biology, 2022, 20, 46.	3.8	8
86	Remarkable diversity of intron-1 of the para voltage-gated sodium channel gene in an Anopheles gambiae/Anopheles coluzzii hybrid zone. Malaria Journal, 2015, 14, 9.	2.3	7
87	Development and application of a tri-allelic PCR assay for screening Vgsc-L1014F kdr mutations associated with pyrethroid and organochlorine resistance in the mosquito Culex quinquefasciatus. Parasites and Vectors, 2019, 12, 232.	2.5	6
88	Expression of pyrethroid metabolizing P450 enzymes characterizes highly resistant Anopheles vector species targeted by successful deployment of PBO-treated bednets in Tanzania. PLoS ONE, 2022, 17, e0249440.	2.5	6
89	Evolving the world's most dangerous animal. Trends in Parasitology, 2015, 31, 39-40.	3.3	5
90	Spatiotemporal distribution and insecticide resistance status of Aedes aegypti in Ghana. Parasites and Vectors, 2022, 15, 61.	2.5	5

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91	ALLOZYME AND AFLP ANALYSES OF GENETIC POPULATION STRUCTURE IN THE HAIRY EDIBLE CRAB CANCER SETOSUS FROM THE CHILEAN COAST. Journal of Crustacean Biology, 2003, 23, 486-494.	0.8	4
92	Development of a rapid field-applicable molecular diagnostic for knockdown resistance (kdr) markers in An. gambiae. Parasites and Vectors, 2018, 11, 307.	2.5	3
93	Open source 3D printable replacement parts for the WHO insecticide susceptibility bioassay system. Parasites and Vectors, 2019, 12, 539.	2.5	1
94	Susceptibility status of larval Aedes aegypti mosquitoes in the Western Region of Saudi Arabia. Entomological Research, 2021, 51, 387-392.	1.1	1
95	RNA editing: an overlooked source of fine-scale adaptation in insect vectors?. Current Opinion in Insect Science, 2020, 40, 48-55.	4.4	1