Cock van Oosterhout

List of Publications by Citations

117 papers	12,484 citations	37 h-index	111 g-index
134 ext. papers	14,273 ext. citations	5.9 avg, IF	6.48 L-index

#	Paper	IF	Citations
117	micro-checker: software for identifying and correcting genotyping errors in microsatellite data. *Molecular Ecology Notes*, **2004**, 4, 535-538		7911
116	Estimates of genetic differentiation measured by F(ST) do not necessarily require large sample sizes when using many SNP markers. *PLoS ONE*, **2012**, 7, e42649	3.7	261
115	Estimation and adjustment of microsatellite null alleles in nonequilibrium populations. *Molecular Ecology Notes*, **2006**, 6, 255-256		237
114	Evolutionary genomics of the cold-adapted diatom Fragilariopsis cylindrus. *Nature*, **2017**, 541, 536-540	50.4	226
113	Rapid transcriptional plasticity of duplicated gene clusters enables a clonally reproducing aphid to colonise diverse plant species. *Genome Biology*, **2017**, 18, 27	18.3	208
112	Temporal analysis of archived samples indicates marked genetic changes in declining North Sea cod (Gadus morhua). *Proceedings of the Royal Society B: Biological Sciences*, **2003**, 270, 2125-32	4.4	176
111	Inbreeding depression and genetic load of sexually selected traits: how the guppy lost its spots. *Journal of Evolutionary Biology*, **2003**, 16, 273-81	2.3	121
110	Genome-wide single nucleotide polymorphisms reveal population history and adaptive divergence in wild guppies. *Molecular Ecology*, **2010**, 19, 968-84	5.7	116
109	Female preference for conspecific males based on olfactory cues in a Lake Malawi cichlid fish. *Biology Letters*, **2005**, 1, 411-4	3.6	115
108	A new theory of MHC evolution: beyond selection on the immune genes. *Proceedings of the Royal Society B: Biological Sciences*, **2009**, 276, 657-65	4.4	113
107	BALANCING SELECTION, RANDOM GENETIC DRIFT, AND GENETIC VARIATION AT THE MAJOR HISTOCOMPATIBILITY COMPLEX IN TWO WILD POPULATIONS OF GUPPIES (POECILIA RETICULATA). *Evolution; International Journal of Organic Evolution*, **2006**, 60, 2562-2574	3.8	111
106	BALANCING SELECTION, RANDOM GENETIC DRIFT, AND GENETIC VARIATION AT THE MAJOR HISTOCOMPATIBILITY COMPLEX IN TWO WILD POPULATIONS OF GUPPIES (POECILIA RETICULATA). *Evolution; International Journal of Organic Evolution*, **2006**, 60, 2562	3.8	103
105	Genetic population structure and contemporary dispersal patterns of a recent European invader, the Chinese mitten crab, Eriocheir sinensis. *Molecular Ecology*, **2007**, 16, 231-42	5.7	103
104	Multiple FLC haplotypes defined by independent cis-regulatory variation underpin life history diversity in Arabidopsis thaliana. *Genes and Development*, **2014**, 28, 1635-40	12.6	98
103	Population genetic analysis of microsatellite variation of guppies (Poecilia reticulata) in Trinidad and Tobago: evidence for a dynamic source-sink metapopulation structure, founder events and population bottlenecks. *Journal of Evolutionary Biology*, **2009**, 22, 485-97	2.3	94
102	Rapid loss of MHC class II variation in a bottlenecked population is explained by drift and loss of copy number variation. *Journal of Evolutionary Biology*, **2011**, 24, 1847-56	2.3	86
101	MHC adaptive divergence between closely related and sympatric African cichlids. *PLoS ONE*, **2007**, 2, e734	3.7	81

100	Genetic architecture and evolution of the S locus supergene in Primula vulgaris. *Nature Plants*, **2016**, 2, 16188	11.5	79
99	Experimental harvesting of fish populations drives genetically based shifts in body size and maturation. *Frontiers in Ecology and the Environment*, **2013**, 11, 181-187	5.5	76
98	Effect of gyrodactylid ectoparasites on host behaviour and social network structure in guppies Poecilia reticulata. *Behavioral Ecology and Sociobiology*, **2011**, 65, 2219-2227	2.5	75
97	Selection by parasites in spate conditions in wild Trinidadian guppies (Poecilia reticulata). *International Journal for Parasitology*, **2007**, 37, 805-12	4.3	75
96	Gene conversion rapidly generates major histocompatibility complex diversity in recently founded bird populations. *Molecular Ecology*, **2011**, 20, 5213-25	5.7	71
95	Ultra-deep Illumina sequencing accurately identifies MHC class IIb alleles and provides evidence for copy number variation in the guppy (Poecilia reticulata). *Molecular Ecology Resources*, **2014**, 14, 753-67	8.4	69
94	The impact of parasites on the life history evolution of guppies (Poecilia reticulata): the effects of host size on parasite virulence. *International Journal for Parasitology*, **2007**, 37, 1449-58	4.3	65
93	Marked variation in parasite resistance between two wild populations of the Trinidadian guppy, Poecilia reticulata (Pisces: Poeciliidae). *Biological Journal of the Linnean Society*, **2003**, 79, 645-651	1.9	58
92	Evolutionary genomics of anthroponosis in Cryptosporidium. *Nature Microbiology*, **2019**, 4, 826-836	26.6	53
91	Immunogenetic novelty confers a selective advantage in host-pathogen coevolution. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 1552-1557	11.5	53
90	Balancing selection, random genetic drift, and genetic variation at the major histocompatibility complex in two wild populations of guppies (Poecilia reticulata). *Evolution; International Journal of Organic Evolution*, **2006**, 60, 2562-74	3.8	53
89	The role of innate and acquired resistance in two natural populations of guppies (Poecilia reticulata) infected with the ectoparasite Gyrodactylus turnbulli. *Biological Journal of the Linnean Society*, **2007**, 90, 647-655	1.9	51
88	Sex-specific differences in shoaling affect parasite transmission in guppies. *PLoS ONE*, **2010**, 5, e13285	3.7	50
87	Evidence for suppression of immunity as a driver for genomic introgressions and host range expansion in races of Albugo candida, a generalist parasite. *ELife*, **2015**, 4,	8.9	50
86	Critical review of NGS analyses for de novo genotyping multigene families. *Molecular Ecology*, **2014**, 23, 3957-72	5.7	46
85	The guppy as a conservation model: implications of parasitism and inbreeding for reintroduction success. *Conservation Biology*, **2007**, 21, 1573-83	6	46
84	Inbreeding depression and genetic load in laboratory metapopulations of the butterfly Bicyclus anynana. *Evolution; International Journal of Organic Evolution*, **2000**, 54, 218-25	3.8	45
83	Invasive cyprinid fish in Europe originate from the single introduction of an admixed source population followed by a complex pattern of spread. *PLoS ONE*, **2011**, 6, e18560	3.7	45

82	Parasite transmission in social interacting hosts: monogenean epidemics in guppies. *PLoS ONE*, **2011**, 6, e22634	3.7	40
81	Evolution of MHC class IIB in the genome of wild and ornamental guppies, Poecilia reticulata. *Heredity*, **2006**, 97, 111-8	3.6	37
80	Contrasting effects of acute and chronic stress on the transcriptome, epigenome, and immune response of Atlantic salmon. *Epigenetics*, **2018**, 13, 1191-1207	5.7	37
79	A Model of Genome Size Evolution for Prokaryotes in Stable and Fluctuating Environments. *Genome Biology and Evolution*, **2015**, 7, 2344-51	3.9	36
78	Adaptive phenotypic response to climate enabled by epigenetics in a K-strategy species, the fish (Rajidae). *Royal Society Open Science*, **2016**, 3, 160299	3.3	34
77	Assortative mating among Lake Malawi cichlid fish populations is not simply predictable from male nuptial colour. *BMC Evolutionary Biology*, **2009**, 9, 53	3	34
76	On the neutrality of molecular genetic markers: pedigree analysis of genetic variation in fragmented populations. *Molecular Ecology*, **2004**, 13, 1025-34	5.7	34
75	Gyrodactylus pictae n. sp. (Monogenea: Gyrodactylidae) from the Trinidadian swamp guppy Poecilia picta Regan, with a discussion on species of Gyrodactylus von Nordmann, 1832 and their poeciliid hosts. *Systematic Parasitology*, **2005**, 60, 159-64	1	34
74	Parasites of Trinidadian guppies: evidence for sex- and age-specific trait-mediated indirect effects of predators. *Ecology*, **2015**, 96, 489-98	4.6	32
73	HYBRIDCHECK: software for the rapid detection, visualization and dating of recombinant regions in genome sequence data. *Molecular Ecology Resources*, **2016**, 16, 534-9	8.4	31
72	Secondary contact seeds phenotypic novelty in cichlid fishes. *Proceedings of the Royal Society B: Biological Sciences*, **2015**, 282, 20142272	4.4	29
71	Evolutionary genetics of immunological supertypes reveals two faces of the Red Queen. *Nature Communications*, **2017**, 8, 1294	17.4	29
70	Pathogen enrichment sequencing (PenSeq) enables population genomic studies in oomycetes. *New Phytologist*, **2019**, 221, 1634-1648	9.8	28
69	Albugo candida race diversity, ploidy and host-associated microbes revealed using DNA sequence capture on diseased plants in the field. *New Phytologist*, **2019**, 221, 1529-1543	9.8	27
68	Optimal release strategies for captive-bred animals in reintroduction programs: Experimental infections using the guppy as a model organism. *Biological Conservation*, **2010**, 143, 35-41	6.2	26
67	Solutions for PCR, cloning and sequencing errors in population genetic analysis. *Conservation Genetics*, **2010**, 11, 1095-1097	2.6	26
66	Mixed infections and hybridisation in monogenean parasites. *PLoS ONE*, **2012**, 7, e39506	3.7	25
65	The effects of inbreeding on disease susceptibility: Gyrodactylus turnbulli infection of guppies, Poecilia reticulata. *Experimental Parasitology*, **2016**, 167, 32-7	2.1	25

64	Mendelian inheritance pattern and high mutation rates of microsatellite alleles in the diatom Pseudo-nitzschia multistriata. *Protist*, **2013**, 164, 89-100	2.5	22
63	Evidence for cryptic speciation in directly transmitted gyrodactylid parasites of Trinidadian guppies. *PLoS ONE*, **2015**, 10, e0117096	3.7	22
62	High variance in reproductive success generates a false signature of a genetic bottleneck in populations of constant size: a simulation study. *BMC Bioinformatics*, **2013**, 14, 309	3.6	20
61	Impact of a mouth parasite in a marine fish differs between geographical areas. *Biological Journal of the Linnean Society*, **2012**, 105, 842-852	1.9	19
60	INBREEDING DEPRESSION AND GENETIC LOAD IN LABORATORY METAPOPULATIONS OF THE BUTTERFLY BICYCLUS ANYNANA. *Evolution; International Journal of Organic Evolution*, **2000**, 54, 218	3.8	19
59	Divergent selection for opsin gene variation in guppy (Poecilia reticulata) populations of Trinidad and Tobago. *Heredity*, **2014**, 113, 381-9	3.6	18
58	Elevated mtDNA diversity in introduced populations of Cynotilapia afra (Günther 1894) in Lake Malawi National Park is evidence for multiple source populations and hybridization. *Molecular Ecology*, **2009**, 18, 4380-9	5.7	18
57	Gyro-scope: an individual-based computer model to forecast gyrodactylid infections on fish hosts. *International Journal for Parasitology*, **2008**, 38, 541-8	4.3	18
56	Getting into hot water: sick guppies frequent warmer thermal conditions. *Oecologia*, **2016**, 181, 911-7	2.9	17
55	Sex-specific changes in the aphid DNA methylation landscape. *Molecular Ecology*, **2019**, 28, 4228-4241	5.7	17
54	Cryptic MHC polymorphism revealed but not explained by selection on the class IIb peptide-binding region. *Molecular Biology and Evolution*, **2012**, 29, 1631-44	8.3	17
53	A complex resistance locus in Solanum americanum recognizes a conserved Phytophthora effector. *Nature Plants*, **2021**, 7, 198-208	11.5	17
52	Immigrant reproductive dysfunction facilitates ecological speciation. *Evolution; International Journal of Organic Evolution*, **2017**, 71, 2510-2521	3.8	16
51	A further cost for the sicker sex? Evidence for male-biased parasite-induced vulnerability to predation. *Ecology and Evolution*, **2016**, 6, 2506-15	2.8	16
50	Toll-like receptor variation in the bottlenecked population of the endangered Seychelles warbler. *Animal Conservation*, **2017**, 20, 235-250	3.2	14
49	Experimental infections with the tropical monogenean, Gyrodactylus bullatarudis: potential invader or experimental fluke?. *Parasitology International*, **2009**, 58, 249-54	2.1	14
48	Biocontrol of common carp in Australia poses risks to biosecurity. *Nature Ecology and Evolution*, **2017**, 1, 87	12.3	13
47	Human induced stepping-stone colonisation of an admixed founder population: the spread of topmouth gudgeon (Pseudorasbora parva) in Europe. *Aquatic Sciences*, **2015**, 77, 17-25	2.5	12

46	Mutation load is the spectre of species conservation. *Nature Ecology and Evolution*, **2020**, 4, 1004-1006	12.3	12
45	On the Ecology and Host Relationships of Acanthogyrus (Acanthosentis) tilapiae (Acanthocephala: Quadrigyridae) from Cichlids in Lake Malawi. *Comparative Parasitology*, **2008**, 75, 278-282	0.3	12
44	The effect of extrinsic mortality on genome size evolution in prokaryotes. *ISME Journal*, **2017**, 11, 1011-1018	10.3	11
43	Toll-like receptor variation in the bottlenecked population of the Seychelles warbler: computer simulations see the ghost of selection past and quantify the drift debt. *Journal of Evolutionary Biology*, **2017**, 30, 1276-1287	2.3	11
42	The effects of recombination, mutation and selection on the evolution of the Rp1 resistance genes in grasses. *Molecular Ecology*, **2015**, 24, 3077-92	5.7	11
41	Inference of selection based on temporal genetic differentiation in the study of highly polymorphic multigene families. *PLoS ONE*, **2012**, 7, e42119	3.7	11
40	Can parasites use predators to spread between primary hosts?. *Parasitology*, **2013**, 140, 1138-43	2.7	11
39	Trans-species polymorphism, HLA-disease associations and the evolution of the MHC. *Communicative and Integrative Biology*, **2009**, 2, 408-10	1.7	11
38	Female guppies (Poecilia reticulata) show no preference for conspecific chemosensory cues in the field or an artificial flow chamber. *Behaviour*, **2008**, 145, 1329-1346	1.4	11
37	Chromosome-Scale Genome Assemblies of Aphids Reveal Extensively Rearranged Autosomes and Long-Term Conservation of the X Chromosome. *Molecular Biology and Evolution*, **2021**, 38, 856-875	8.3	11
36	The MC1R gene in the guppy (Poecilia reticulata): Genotypic and phenotypic polymorphisms. *BMC Research Notes*, **2011**, 4, 31	2.3	10
35	Entering uncharted waters: Long-term dynamics of two data limited fish species, turbot and brill, in the North Sea. *Journal of Sea Research*, **2013**, 84, 87-95	1.9	9
34	Building a locally diploid genome and transcriptome of the diatom Fragilariopsis cylindrus. *Scientific Data*, **2017**, 4, 170149	8.2	8
33	Avian β-defensin variation in bottlenecked populations: the Seychelles warbler and other congeners. *Conservation Genetics*, **2016**, 17, 661-674	2.6	8
32	Wondering about wandering whiting: Distribution of North Sea whiting between the 1920s and 2000s. *Fisheries Research*, **2013**, 145, 54-65	2.3	8
31	Pedigree analysis on small laboratory populations of the butterfly Bicyclus anynana: The effects of selection on inbreeding and fitness. *Conservation Genetics*, **2000**, 1, 321-328	2.6	8
30	Genetic load: genomic estimates and applications in non-model animals.. *Nature Reviews Genetics*, **2022**,	30.1	8
29	A complex resistance locus in Solanum americanum recognizes a conserved Phytophthora effector		8

28	Long-term cleaning patterns of the sharknose goby (Elacatinus evelynae). *Coral Reefs*, **2019**, 38, 321-330	4.2	7
27	Parasite diversity and ecology in a model species, the guppy () in Trinidad. *Royal Society Open Science*, **2020**, 7, 191112	3.3	7
26	Segregation of species-specific male attractiveness in f(2) hybrid lake Malawi cichlid fish. *International Journal of Evolutionary Biology*, **2011**, 2011, 426179		7
25	Parasites pitched against nature: Pitch Lake water protects guppies (Poecilia reticulata) from microbial and gyrodactylid infections. *Parasitology*, **2012**, 139, 1772-9	2.7	7
24	Mitotic recombination between homologous chromosomes drives genomic diversity in diatoms. *Current Biology*, **2021**, 31, 3221-3232.e9	6.3	7
23	Hybridization generates a hopeful monster: a hermaphroditic selfing cichlid. *Royal Society Open Science*, **2016**, 3, 150684	3.3	6
22	The effects of historical fragmentation on major histocompatibility complex class II and microsatellite variation in the Aegean island reptile,. *Ecology and Evolution*, **2017**, 7, 4568-4581	2.8	6
21	Maintenance of major histocompatibility supertype variation in selfing vertebrate is no evidence for overdominant selection. *Proceedings of the Royal Society B: Biological Sciences*, **2013**, 280, 20122501	4.4	6
20	First polymorphic microsatellites for the gyrodactylids (Monogenea), an important group of fish pathogens. *Conservation Genetics Resources*, **2011**, 3, 177-180	0.8	6
19	Astiotrema turneri n. sp. (Digenea: Plagiorchiidae) from cichlid fishes (Cichlidae: Perciformes) of Lake Malawi, south-eastern Africa. *Zootaxa*, **2006**, 1319, 43	0.5	6
18	Mismatch between molecular (mtDNA) and morphological classification of Macrobrachium prawns from Southern Nigeria: Cryptic freshwater species and brackish water morphotypes. *Aquaculture*, **2013**, 410-411, 25-31	4.4	4
17	Comment on "Individual heterozygosity predicts translocation success in threatened desert tortoises". *Science*, **2021**, 372,	33.3	4
16	Depletion of MHC supertype during domestication can compromise immunocompetence. *Molecular Ecology*, **2021**, 30, 736-746	5.7	4
15	Comparative genomics revealed adaptive admixture in in Africa. *Microbial Genomics*, **2021**, 7,	4.4	4
14	Upstream guppies (Poecilia reticulata, Peters, 1859) go against the flow. *Biota Neotropica*, **2012**, 12, 68-72		3
13	Population constraints on the Grenada Dove Leptotila wellsi: preliminary findings and proposals from south-west Grenada. *Bird Conservation International*, **2016**, 26, 205-213	1.7	2
12	Conservation genetics: 50 Years and counting. *Conservation Letters*, **2021**, 14, e12789	6.9	2
11	Genome evolution of a nonparasitic secondary heterotroph, the diatom .. *Science Advances*, **2022**, 8, eabi5075	14.3	2

10	VIVID: a web application for variant interpretation and visualisation in multidimensional analyses		1
9	Sex-specific changes in the aphid DNA methylation landscape		1
8	Genetic variation in resistance and high fecundity impede viral biocontrol of invasive fish. *Journal of Applied Ecology*, **2021**, 58, 148-157	5.8	1
7	Diversity, prevalence, and expression of cyanase genes (cynS) in planktonic marine microorganisms. *ISME Journal*, **2021**,	11.9	1
6	Means, motive, and opportunity for biological invasions: genetic introgression in a fungal pathogen		1
5	Position, swimming direction and group size of fin whales (Balaenoptera physalus) in the presence of a fast-ferry in the Bay of Biscay. *Oceanologia*, **2016**, 58, 235-240	2.2	0
4	Functional immunogenetic variation, rather than local adaptation, predicts ectoparasite infection intensity in a model fish species. *Molecular Ecology*, **2021**, 30, 5588-5604	5.7	0
3	Genomic erosion in a demographically recovered bird species during conservation rescue.. *Conservation Biology*, **2022**, e13918	6	0
2	Structure and Evolution of Diatom Nuclear Genes and Genomes **2022**, 111-145		
1	Accounting for the genetic load in assisted reproductive technology. *Clinical and Translational Medicine*, **2022**, 12,	5.7	