Ross D Houston

List of Publications by Year
in descending order

94 papers	5,850 citations	79946 39 h-index	89383 70 g-index
112 all docs	112 docs citations	112 times ranked	9612 citing authors

#	Article	IF	Citations
1	Harnessing genomics to fast-track genetic improvement in aquaculture. Nature Reviews Genetics, 2020, 21, 389-409.	16.7	317
2	Major Quantitative Trait Loci Affect Resistance to Infectious Pancreatic Necrosis in Atlantic Salmon (Salmo salar). Genetics, 2008, 178, 1109-1115.	2.9	265
3	Applications of genotyping by sequencing in aquaculture breeding and genetics. Reviews in Aquaculture, 2018, 10, 670-682.	9.6	229
4	Development and validation of a high density SNP genotyping array for Atlantic salmon (Salmo salar). BMC Genomics, 2014, 15, 90.	2.9	225
5	Genome wide association and genomic prediction for growth traits in juvenile farmed Atlantic salmon using a high density SNP array. BMC Genomics, 2015, 16, 969.	2.9	218
6	Genomic prediction of host resistance to sea lice in farmed Atlantic salmon populations. Genetics Selection Evolution, 2016, 48, 47.	3.0	208
7	Linkage maps of the Atlantic salmon (Salmo salar) genome derived from RAD sequencing. BMC Genomics, 2014, 15, 166.	2.9	152
8	Genome-Wide Association and Genomic Selection for Resistance to Amoebic Gill Disease in Atlantic Salmon. G3: Genes, Genomes, Genetics, 2018, 8, 1195-1203.	1.9	146
9	The susceptibility of Atlantic salmon fry to freshwater infectious pancreatic necrosis is largely explained by a major QTL. Heredity, 2010, 105, 318-327.	2.7	143
10	Potential of Genome Editing to Improve Aquaculture Breeding and Production. Trends in Genetics, 2019, 35, 672-684.	6.9	135
11	Genomic Prediction of Resistance to Pasteurellosis in Gilthead Sea Bream (Sparus aurata) Using 2b-RAD Sequencing. G3: Genes, Genomes, Genetics, 2016, 6, 3693-3700.	1.9	130
12	Genetics and genomics of disease resistance in salmonid species. Frontiers in Genetics, 2014, 5, 415.	2.3	122
13	Characterisation of QTL-linked and genome-wide restriction site-associated DNA (RAD) markers in farmed Atlantic salmon. BMC Genomics, 2012, 13, 244.	2.9	121
14	Evidence for the Higgs-boson Yukawa coupling to tau leptons with the ATLAS detector. Journal of High Energy Physics, 2015, 2015, 1.	4.8	120
15	Genomic Selection for Growth Traits in Pacific Oyster (Crassostrea gigas): Potential of Low-Density Marker Panels for Breeding Value Prediction. Frontiers in Genetics, 2018, 9, 391.	2.3	112
16	Potential of genotyping-by-sequencing for genomic selection in livestock populations. Genetics Selection Evolution, 2015, 47, 12.	3.0	111
17	Future directions in breeding for disease resistance in aquaculture species. Revista Brasileira De Zootecnia, 2017, 46, 545-551.	0.7	109
18	Development of a Medium Density Combined-Species SNP Array for Pacific and European Oysters (Crassostrea gigasandOstrea edulis). G3: Genes, Genomes, Genetics, 2017, 7, 2209-2218.	1.9	102

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19	A chromosome-level genome assembly for the Pacific oyster Crassostrea gigas. GigaScience, 2021, 10, .	6.8	102
20	Genotype Imputation To Improve the Cost-Efficiency of Genomic Selection in Farmed Atlantic Salmon. G3: Genes, Genomes, Genetics, 2017, 7, 1377-1383.	1.9	100
21	Functional Annotation of All Salmonid Genomes (FAASG): an international initiative supporting future salmonid research, conservation and aquaculture. BMC Genomics, 2017, 18, 484.	2.9	100
22	Genome-wide association and genomic prediction of resistance to viral nervous necrosis in European sea bass (Dicentrarchus labrax) using RAD sequencing. Genetics Selection Evolution, 2018, 50, 30.	3.0	89
23	Accuracy of Genomic Evaluations of Juvenile Growth Rate in Common Carp (Cyprinus carpio) Using Genotyping by Sequencing. Frontiers in Genetics, 2018, 9, 82.	2.3	86
24	Genomics in aquaculture to better understand species biology and accelerate genetic progress. Frontiers in Genetics, 2015, 6, 128.	2.3	82
25	Gene expression comparison of resistant and susceptible Atlantic salmon fry challenged with Infectious Pancreatic Necrosis virus reveals a marked contrast in immune response. BMC Genomics, 2016, 17, 279.	2.9	81
26	Amelanocortin-4 receptor(MC4R) polymorphism is associated with performance traits in divergently selected large white pig populations. Animal Genetics, 2004, 35, 386-390.	1.7	80
27	Mapping and validation of a major QTL affecting resistance to pancreas disease (salmonid alphavirus) in Atlantic salmon (Salmo salar). Heredity, 2015, 115, 405-414.	2.7	79
28	Atlantic salmon (Salmo salar L.) genetics in the 21st century: taking leaps forward in aquaculture and biological understanding. Animal Genetics, 2019, 50, 3-14.	1.7	71
29	Optimizing Low-Cost Genotyping and Imputation Strategies for Genomic Selection in Atlantic Salmon. G3: Genes, Genomes, Genetics, 2020, 10, 581-590.	1.9	70
30	A Genome-Wide Association Study for Host Resistance to Ostreid Herpesvirus in Pacific Oysters (Crassostrea gigas). G3: Genes, Genomes, Genetics, 2018, 8, 1273-1280.	1.9	67
31	Genomic Prediction Using Low Density Marker Panels in Aquaculture: Performance Across Species, Traits, and Genotyping Platforms. Frontiers in Genetics, 2020, 11, 124.	2.3	67
32	Accuracy of genotype imputation and genomic predictions in a two-generation farmed Atlantic salmon population using high-density and low-density SNP panels. Aquaculture, 2018, 491, 147-154.	3.5	61
33	Discovery and Functional Annotation of Quantitative Trait Loci Affecting Resistance to Sea Lice in Atlantic Salmon. Frontiers in Genetics, 2019, 10, 56.	2.3	61
34	Gene Expression Response to Sea Lice in Atlantic Salmon Skin: RNA Sequencing Comparison Between Resistant and Susceptible Animals. Frontiers in Genetics, 2018, 9, 287.	2.3	54
35	Genetic differences in host infectivity affect disease spread and survival in epidemics. Scientific Reports, 2019, 9, 4924.	3.4	50
36	Optimizing Genomic Prediction of Host Resistance to Koi Herpesvirus Disease in Carp. Frontiers in Genetics, 2019, 10, 543.	2.3	49

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37	Single nucleotide polymorphisms in the insulinâ€like growth factor 1 (<scp>IGF</scp>1) gene are associated with growthâ€related traits in farmed Atlantic salmon. Animal Genetics, 2014, 45, 709-715.	1.7	46
38	Potential of genomic selection for improvement of resistance to ostreid herpesvirus in Pacific oyster (Crassostrea gigas). Animal Genetics, 2020, 51, 249-257.	1.7	46
39	Efficient CRISPR/Cas9 genome editing in a salmonid fish cell line using a lentivirus delivery system. BMC Biotechnology, 2020, 20, 35.	3.4	44
40	Highâ€resolution mapping of the recombination landscape of the phytopathogen Fusarium graminearum suggests twoâ€speed genome evolution. Molecular Plant Pathology, 2018, 19, 341-354.	4.4	43
41	QTL affecting morphometric traits and stress response in the gilthead seabream (Sparus aurata). Aquaculture, 2011, 319, 58-66.	3.5	42
42	Genetic parameters for resistance to Tilapia Lake Virus (TiLV) in Nile tilapia (Oreochromis niloticus). Aquaculture, 2020, 522, 735126.	3.5	42
43	Construction and Annotation of a High Density SNP Linkage Map of the Atlantic Salmon (Salmo) Tj ETQq1 1 0.784314 rgBT /Overl	1.9	41
44	Detailed insights into panâ€European population structure and inbreeding in wild and hatchery Pacific oysters (Crassostrea gigas) revealed by genomeâ€wide SNP data. Evolutionary Applications, 2019, 12, 519-534.	3.2	41
45	Current status and potential of genomic selection to improve selective breeding in the main aquaculture species of International Council for the Exploration of the Sea (ICES) member countries. Aquaculture Reports, 2021, 20, 100700.	1.7	41
46	Mapping and Sequencing of a Significant Quantitative Trait Locus Affecting Resistance to Koi Herpesvirus in Common Carp. G3: Genes, Genomes, Genetics, 2018, 8, 3507-3513.	1.9	39
47	Genomics Toolbox for Farmed Fish. Reviews in Fisheries Science, 2008, 16, 3-15.	1.9	38
48	Segregation of infectious pancreatic necrosis resistance QTL in the early life cycle of Atlantic Salmon (Salmo salar). Animal Genetics, 2010, 41, 531-536.	1.7	36
49	Verification of SNPs Associated with Growth Traits in Two Populations of Farmed Atlantic Salmon. International Journal of Molecular Sciences, 2016, 17, 5.	4.2	36
50	Optimizing hatchery practices for genetic improvement of marine bivalves. Reviews in Aquaculture, 2021, 13, 2289-2304.	9.6	36
51	Development and Validation of an Open Access SNP Array for Nile Tilapia (Oreochromis) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T	1.9	35
52	Development and testing of a combined species SNP array for the European seabass (Dicentrarchus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	2.9	35
53	Genetic improvement technologies to support the sustainable growth of UK aquaculture. Reviews in Aquaculture, 2021, 13, 1958-1985.	9.6	34
54	Surrogate broodstock to enhance biotechnology research and applications in aquaculture. Biotechnology Advances, 2021, 49, 107756.	12.0	34

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55	Balancing selection at a premature stop mutation in the myostatin gene underlies a recessive leg weakness syndrome in pigs. PLoS Genetics, 2019, 15, e1007759.	3.4	33
56	A QTL affecting daily feed intake maps to Chromosome 2 in pigs. Mammalian Genome, 2005, 16, 464-470.	2.3	32
57	Detection of QTL affecting harvest traits in a commercial Atlantic salmon population. Animal Genetics, 2009, 40, 753-755.	1.7	32
58	SNP markers for the genetic characterization of Mexican shrimp broodstocks. Genomics, 2018, 110, 423-429.	2.9	32
59	Population Structure and Genetic Diversity of Nile Tilapia (Oreochromis niloticus) Strains Cultured in Tanzania. Frontiers in Genetics, 2019, 10, 1269.	2.3	32
60	miRNAs Predicted to Regulate Host Anti-viral Gene Pathways in IPNV-Challenged Atlantic Salmon Fry Are Affected by Viral Load, and Associated With the Major IPN Resistance QTL Genotypes in Late Infection. Frontiers in Immunology, 2020, 11, 2113.	4.9	31
61	A major quantitative trait locus affecting resistance to Tilapia lake virus in farmed Nile tilapia (Oreochromis niloticus). Heredity, 2021, 127, 334-343.	2.7	31
62	Exploring the utility of cross-laboratory RAD-sequencing datasets for phylogenetic analysis. BMC Research Notes, 2015, 8, 299.	1.4	29
63	Sequencing and Characterisation of an Extensive Atlantic Salmon (Salmo salar L.) MicroRNA Repertoire. PLoS ONE, 2013, 8, e70136.	2.5	29
64	A SNP in the 5â€² flanking region of the myostatin-1b gene is associated with harvest traits in Atlantic salmon (Salmo salar). BMC Genetics, 2013, 14, 112.	2.7	28
65	Maternal inheritance of deltamethrin resistance in the salmon louse Lepeophtheirus salmonis (KrÃ¸yer) is associated with unique mtDNA haplotypes. PLoS ONE, 2017, 12, e0180625.	2.5	28
66	Characterising the mechanisms underlying genetic resistance to amoebic gill disease in Atlantic salmon using RNA sequencing. BMC Genomics, 2020, 21, 271.	2.9	25
67	The nedd-8 activating enzyme gene underlies genetic resistance to infectious pancreatic necrosis virus in Atlantic salmon. Genomics, 2021, 113, 3842-3850.	2.9	23
68	A Polymorphism in the 5â€²-Untranslated Region of the Porcine Cholecystokinin Type A Receptor Gene Affects Feed Intake and Growth. Genetics, 2006, 174, 1555-1563.	2.9	22
69	Potential of genomic technologies to improve disease resistance in molluscan aquaculture. Philosophical Transactions of the Royal Society B: Biological Sciences, 2021, 376, 20200168.	4.2	20
70	Quantitative trait loci and genes associated with salmonid alphavirus load in Atlantic salmon: implications for pancreas disease resistance and tolerance. Scientific Reports, 2020, 10, 10393.	3.4	19
71	Changed Patterns of Genomic Variation Following Recent Domestication: Selection Sweeps in Farmed Atlantic Salmon. Frontiers in Genetics, 2020, 11, 264.	2.3	18
72	The impact of genetic relationship between training and validation populations on genomic prediction accuracy in Atlantic salmon. Aquaculture Reports, 2022, 23, 101033.	1.7	17

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73	Applying genetic technologies to combat infectious diseases in aquaculture. Reviews in Aquaculture, 2023, 15, 491-535.	9.6	17
74	Characterizing the genetic structure of introduced Nile tilapia (Oreochromis niloticus) strains in Tanzania using double digest RAD sequencing. Aquaculture International, 2020, 28, 477-492.	2.2	16
75	Efficient Genome Editing in Multiple Salmonid Cell Lines Using Ribonucleoprotein Complexes. Marine Biotechnology, 2020, 22, 717-724.	2.3	16
76	Investigating mechanisms underlying genetic resistance to Salmon Rickettsial Syndrome in Atlantic salmon using RNA sequencing. BMC Genomics, 2021, 22, 156.	2.9	16
77	Developments in marine invertebrate primary culture reveal novel cell morphologies in the model bivalve Crassostrea gigas. PeerJ, 2020, 8, e9180.	2.0	16
78	Characterization of OAR1 and OAR18 QTL associated with muscle depth in British commercial terminal sire sheep. Animal Genetics, 2011, 42, 172-180.	1.7	15
79	Experimental measurement of absolute number of atoms vaporized in a graphite cuvette. Talanta, 1989, 36, 743-748.	5.7	14
80	Assessing the genetic diversity of farmed and wild Rufiji tilapia (Oreochromis urolepis) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 462 Td (	1.9	12
81	Assessment of genetic diversity and population structure in cultured Australian Pacific oysters. Animal Genetics, 2019, 50, 686-694.	1.7	11
82	Novel insights into the genetic relationship between growth and disease resistance in an aquaculture strain of Coho salmon (Oncorhynchus kisutch). Aquaculture, 2019, 511, 734207.	3.5	11
83	Exploring genetic resistance to infectious salmon anaemia virus in Atlantic salmon by genome-wide association and RNA sequencing. BMC Genomics, 2021, 22, 345.	2.9	11
84	Towards production of genomeâ€edited aquaculture species. Reviews in Aquaculture, 2023, 15, 404-408.	9.6	11
85	The cholecystokinin type A receptor g.179A>G polymorphism affects feeding rate. Animal Genetics, 2008, 39, 187-188.	1.7	10
86	Transcriptome Profiling of Pacu (Piaractus mesopotamicus) Challenged With Pathogenic Aeromonas hydrophila: Inference on Immune Gene Response. Frontiers in Genetics, 2020, 11, 604.	2.3	10
87	Learned predictiveness acquired through experience prevails over the influence of conflicting verbal instructions in rapid selective attention. PLoS ONE, 2018, 13, e0200051.	2.5	7
88	Is the platelet-to-lymphocyte ratio a new prognostic marker in multiple myeloma?. Journal of Laboratory Physicians, 2018, 10, 363-369.	1.0	7
89	The role of energy reserves in common carp performance inferred from phenotypic and genetic parameters. Aquaculture, 2021, 541, 736799.	3.5	6
90	Conserved QTL and chromosomal inversion affect resistance to columnaris disease in 2 rainbow trout (Oncorhyncus mykiss) populations. G3: Genes, Genomes, Genetics, 2022, 12, .	1.9	6

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91	Genetic relationship between koi herpesvirus disease resistance and production traits inferred from sibling performance in Amur mirror carp. Aquaculture, 2020, 520, 734986.	3.5	4
92	Genomicâ€“Proteomic Research in Sparidae and its Application to Genetic Improvement. , 2011, , 359-381.		3
93	Comparison Studies on Microwave & Muffle Furnace Heat Treatment for Al-B₄C Composite. Advanced Materials Research, 0, 768, 280-284.	0.1	2
94	A REGRA DE TAYLOR ESTRUTURALISTA APLICADA Ã€ ECONOMIA BRASILEIRA ENTRE 2003 E 2015. Revista De Economia Mackenzie, 2023, 20, .	0.0	0