Hopi E Hoekstra

List of Publications by Year
in descending order

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101 papers	16,212 citations	38720 50 h-index	30894 102 g-index
127 all docs	127 docs citations	127 times ranked	15467 citing authors

#	Article	IF	Citations
1	Double Digest RADseq: An Inexpensive Method for De Novo SNP Discovery and Genotyping in Model and Non-Model Species. PLoS ONE, 2012, 7, e37135.	1.1	2,836
2	The Strength of Phenotypic Selection in Natural Populations. American Naturalist, 2001, 157, 245-261.	1.0	1,694
3	THE LOCUS OF EVOLUTION: EVO DEVO AND THE GENETICS OF ADAPTATION. Evolution; International Journal of Organic Evolution, 2007, 61, 995-1016.	1.1	847
4	Does evolutionary theory need a rethink?. Nature, 2014, 514, 161-164.	13.7	727
5	A Single Amino Acid Mutation Contributes to Adaptive Beach Mouse Color Pattern. Science, 2006, 313, 101-104.	6.0	616
6	Combining population genomics and quantitative genetics: finding the genes underlying ecologically important traits. Heredity, 2008, 100, 158-170.	1.2	534
7	Genetics, development and evolution of adaptive pigmentation in vertebrates. Heredity, 2006, 97, 222-234.	1.2	524
8	Molecular spandrels: tests of adaptation at the genetic level. Nature Reviews Genetics, 2011, 12, 767-780.	7.7	465
9	The genetic basis of adaptive melanism in pocket mice. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 5268-5273.	3.3	462
10	Strength and tempo of directional selection in the wild. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 9157-9160.	3.3	401
11	Vertebrate pigmentation: from underlying genes to adaptive function. Trends in Genetics, 2010, 26, 231-239.	2.9	383
12	Adaptive Variation in Beach Mice Produced by Two Interacting Pigmentation Genes. PLoS Biology, 2007, 5, e219.	2.6	285
13	Adaptive Evolution of Multiple Traits Through Multiple Mutations at a Single Gene. Science, 2013, 339, 1312-1316.	6.0	277
14	Convergence in pigmentation at multiple levels: mutations, genes and function. Philosophical Transactions of the Royal Society B: Biological Sciences, 2010, 365, 2439-2450.	1.8	275
15	Molecular and functional basis of phenotypic convergence in white lizards at White Sands. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 2113-2117.	3.3	264
16	On the Origin and Spread of an Adaptive Allele in Deer Mice. Science, 2009, 325, 1095-1098.	6.0	228
17	ECOLOGICAL GENETICS OF ADAPTIVE COLOR POLYMORPHISM IN POCKET MICE: GEOGRAPHIC VARIATION IN SELECTED AND NEUTRAL GENES. Evolution; International Journal of Organic Evolution, 2004, 58, 1329-1341.	1.1	215
18	Discrete genetic modules are responsible for complex burrow evolution in Peromyscus mice. Nature, 2013, 493, 402-405.	13.7	205

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19	The genetic basis of parental care evolution in monogamous mice. Nature, 2017, 544, 434-439.	13.7	205
20	ADAPTIVE REPTILE COLOR VARIATION AND THE EVOLUTION OF THE MCIR GENE. Evolution; International Journal of Organic Evolution, 2004, 58, 1794-1808.	1.1	198
21	The Developmental Role of Agouti in Color Pattern Evolution. Science, 2011, 331, 1062-1065.	6.0	195
22	Loss of Schooling Behavior in Cavefish through Sight-Dependent and Sight-Independent Mechanisms. Current Biology, 2013, 23, 1874-1883.	1.8	182
23	Different genes underlie adaptive melanism in different populations of rock pocket mice. Molecular Ecology, 2003, 12, 1185-1194.	2.0	176
24	Peromyscus mice as a model for studying natural variation. ELife, 2015, 4, .	2.8	165
25	The Genetic Basis of Phenotypic Convergence in Beach Mice: Similar Pigment Patterns but Different Genes. Molecular Biology and Evolution, 2008, 26, 35-45.	3.5	149
26	ECOLOGICAL GENETICS OF ADAPTIVE COLOR POLYMORPHISM IN POCKET MICE: GEOGRAPHIC VARIATION IN SELECTED AND NEUTRAL GENES. Evolution; International Journal of Organic Evolution, 2004, 58, 1329.	1.1	144
27	NATURAL SELECTION ALONG AN ENVIRONMENTAL GRADIENT: A CLASSIC CLINE IN MOUSE PIGMENTATION. Evolution; International Journal of Organic Evolution, 2008, 62, 1555-1570.	1.1	144
28	THE SELECTIVE ADVANTAGE OF CRYPSIS IN MICE. Evolution; International Journal of Organic Evolution, 2010, 64, 2153-8.	1.1	144
29	Unraveling the thread of natureâ€™s tapestry: the genetics of diversity and convergence in animal pigmentation. Pigment Cell and Melanoma Research, 2012, 25, 411-433.	1.5	143
30	Linking a mutation to survival in wild mice. Science, 2019, 363, 499-504.	6.0	126
31	Competition drives cooperation among closely related sperm of deer mice. Nature, 2010, 463, 801-803.	13.7	122
32	A Family of non-GPCR Chemosensors Defines an Alternative Logic for Mammalian Olfaction. Cell, 2016, 165, 1734-1748.	13.5	117
33	Local adaptation in the rock pocket mouse (Chaetodipus intermedius): natural selection and phylogenetic history of populations. Heredity, 2005, 94, 217-228.	1.2	115
34	Evolutionary Biology for the 21st Century. PLoS Biology, 2013, 11, e1001466.	2.6	115
35	Are we there yet? Tracking the development of new model systems. Trends in Genetics, 2008, 24, 353-360.	2.9	109
36	Causes and consequences of the evolution of reproductive proteins. International Journal of Developmental Biology, 2008, 52, 769-780.	0.3	105

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37	The Evolving Neural and Genetic Architecture ofÂVertebrate Olfaction. Current Biology, 2016, 26, R1039-R1049.	1.8	105
38	Developmental mechanisms of stripe patterns in rodents. Nature, 2016, 539, 518-523.	13.7	101
39	Melanism in Peromyscus Is Caused by Independent Mutations in Agouti. PLoS ONE, 2009, 4, e6435.	1.1	100
40	Monogamy Evolves through Multiple Mechanisms: Evidence from V1aR in Deer Mice. Molecular Biology and Evolution, 2010, 27, 1269-1278.	3.5	98
41	The Evolutionary History of Nebraska Deer Mice: Local Adaptation in the Face of Strong Gene Flow. Molecular Biology and Evolution, 2018, 35, 792-806.	3.5	76
42	The draft genome of a socially polymorphic halictid bee, Lasioglossum albipes. Genome Biology, 2013, 14, R142.	13.9	72
43	Adaptive Evolution of Fertilization Proteins within a Genus: Variation in ZP2 and ZP3 in Deer Mice (Peromyscus). Molecular Biology and Evolution, 2006, 23, 1656-1669.	3.5	71
44	Adaptive basis of geographic variation: genetic, phenotypic and environmental differences among beach mouse populations. Proceedings of the Royal Society B: Biological Sciences, 2009, 276, 3809-3818.	1.2	69
45	MHC Class II Pseudogene and Genomic Signature of a 32-kb Cosmid in the House Finch (Carpodacus) Tj ETQq1 1 0.784314 rgBT /Ove	2.4	68
46	Comparative Analysis of Testis Protein Evolution in Rodents. Genetics, 2008, 179, 2075-2089.	1.2	67
47	The genetic basis of a social polymorphism in halictid bees. Nature Communications, 2018, 9, 4338.	5.8	66
48	EVIDENCE OF ADAPTATION FROM ANCESTRAL VARIATION IN YOUNG POPULATIONS OF BEACH MICE. Evolution; International Journal of Organic Evolution, 2012, 66, 3209-3223.	1.1	64
49	Expanding evolutionary neuroscience: insights from comparing variation in behavior. Neuron, 2021, 109, 1084-1099.	3.8	64
50	The Tug1 lncRNA locus is essential for male fertility. Genome Biology, 2020, 21, 237.	3.8	61
51	The dynamics of sperm cooperation in a competitive environment. Proceedings of the Royal Society B: Biological Sciences, 2014, 281, 20140296.	1.2	60
52	Measuring Natural Selection on Genotypes and Phenotypes in the Wild. Cold Spring Harbor Symposia on Quantitative Biology, 2009, 74, 155-168.	2.0	55
53	The evolution of burrowing behaviour in deer mice (genus Peromyscus). Animal Behaviour, 2009, 77, 603-609.	0.8	54
54	Convergent Evolution of Novel Protein Function in Shrew and Lizard Venom. Current Biology, 2009, 19, 1925-1931.	1.8	53

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55	A collection of non-human primate computed tomography scans housed in MorphoSource, a repository for 3D data. Scientific Data, 2016, 3, 160001.	2.4	51
56	Expression and conservation of processed copies of the RBMX gene. Mammalian Genome, 2001, 12, 538-545.	1.0	50
57	Peromyscus burrowing: A model system for behavioral evolution. Seminars in Cell and Developmental Biology, 2017, 61, 107-114.	2.3	49
58	Coevolution of Genome Architecture and Social Behavior. Trends in Ecology and Evolution, 2019, 34, 844-855.	4.2	49
59	On the Prospect of Identifying Adaptive Loci in Recently Bottlenecked Populations. PLoS ONE, 2014, 9, e110579.	1.1	44
60	Maternal-Fetal Conflict: Rapidly Evolving Proteins in the Rodent Placenta. Molecular Biology and Evolution, 2010, 27, 1221-1225.	3.5	43
61	The genetic basis and fitness consequences of sperm midpiece size in deer mice. Nature Communications, 2016, 7, 13652.	5.8	40
62	Signatures of Reproductive Isolation in Patterns of Single Nucleotide Diversity Across Inbred Strains of Mice. Genetics, 2005, 171, 1905-1916.	1.2	39
63	The role of isoforms in the evolution of cryptic coloration in Peromyscus mice. Molecular Ecology, 2017, 26, 245-258.	2.0	37
64	Evolution and Genetics of Precocious Burrowing Behavior in Peromyscus Mice. Current Biology, 2017, 27, 3837-3845.e3.	1.8	35
65	The ultimate and proximate mechanisms driving the evolution of long tails in forest deer mice. Evolution; International Journal of Organic Evolution, 2017, 71, 261-273.	1.1	34
66	EVOLUTION: Parallel Evolution Is in the Genes. Science, 2004, 303, 1779-1781.	6.0	32
67	Rodents. Current Biology, 2008, 18, R406-R410.	1.8	32
68	Multiple origins of XY female mice (genus Akodon): phylogenetic and chromosomal evidence. Proceedings of the Royal Society B: Biological Sciences, 2000, 267, 1825-1831.	1.2	29
69	AN UNUSUAL SEX-DETERMINATION SYSTEM IN SOUTH AMERICAN FIELD MICE (GENUS AKODON): THE ROLE OF MUTATION, SELECTION, AND MEIOTIC DRIVE IN MAINTAINING XY FEMALES. Evolution; International Journal of Organic Evolution, 2001, 55, 190-197.	1.1	24
70	Empowering 21st Century Biology. BioScience, 2010, 60, 923-930.	2.2	24
71	Sixty polymorphic microsatellite markers for the oldfield mouse developed in Peromyscus polionotus and Peromyscus maniculatus. Molecular Ecology Notes, 2006, 6, 36-40.	1.7	23
72	Reproductive protein evolution within and between species: maintenance of divergent ZP3 alleles in Peromyscus. Molecular Ecology, 2008, 17, 2616-2628.	2.0	22

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73	Body size, dispersal ability and compositional disharmony: the carnivore-dominated fauna of the Kuril Islands. Diversity and Distributions, 1998, 4, 135-149.	1.9	21
74	ADAPTIVE REPTILE COLOR VARIATION AND THE EVOLUTION OF THE MC1R GENE. Evolution; International Journal of Organic Evolution, 2004, 58, 1794.	1.1	21
75	The genetics of morphological and behavioural island traits in deer mice. Proceedings of the Royal Society B: Biological Sciences, 2019, 286, 20191697.	1.2	21
76	Population structure and plumage polymorphism: The intraspecific evolutionary relationships of a polymorphic raptor, Buteo jamaicensis harlani. BMC Evolutionary Biology, 2010, 10, 224.	3.2	20
77	The Study of Adaptation and Speciation in the Genomic Era. Journal of Mammalogy, 2007, 88, 1-4.	0.6	19
78	cis-Regulatory changes in locomotor genes are associated with the evolution of burrowing behavior. Cell Reports, 2022, 38, 110360.	2.9	19
79	The evolution of nesting behaviour in Peromyscus mice. Animal Behaviour, 2018, 139, 103-115.	0.8	18
80	Evolution of Protein Expression: New Genes for a New Diet. Current Biology, 2007, 17, R1014-R1016.	1.8	16
81	African striped mice. Current Biology, 2018, 28, R299-R301.	1.8	16
82	Five hundred microsatellite loci for Peromyscus. Conservation Genetics, 2010, 11, 1243-1246.	0.8	15
83	Sexual imprinting and speciation between two Peromyscus species. Evolution; International Journal of Organic Evolution, 2018, 72, 274-287.	1.1	14
84	Behavioral genetics and genomics: Mendelâ€™s peas, mice, and bees. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	11
85	Direct Gamete Sequencing Reveals No Evidence for Segregation Distortion in House Mouse Hybrids. PLoS ONE, 2015, 10, e0131933.	1.1	10
86	Tail Length Evolution in Deer Mice: Linking Morphology, Behavior, and Function. Integrative and Comparative Biology, 2021, 61, 385-397.	0.9	10
87	Mus spicilegus. Current Biology, 2012, 22, R858-R859.	1.8	9
88	Sibling rivalry: Males with more brothers develop larger testes. Ecology and Evolution, 2018, 8, 8197-8203.	0.8	9
89	An enhancer of Agouti contributes to parallel evolution of cryptically colored beach mice. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	9
90	Striking coat colour variation in tuco-tucos (Rodentia: Ctenomyidae): a role for the melanocortin-1 receptor?. Biological Journal of the Linnean Society, 2012, 105, 665-680.	0.7	7

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91	Stickleback is the catch of the day. Nature, 2012, 484, 46-47.	13.7	6
92	Gregor Johann Mendel and the development of modern evolutionary biology. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	6
93	Turing patterns: how the fish got its spots. Pigment Cell and Melanoma Research, 2011, 24, 12-14.	1.5	5
94	Divergent genetic mechanism leads to spiny hair in rodents. PLoS ONE, 2018, 13, e0202219.	1.1	5
95	Unequal Transmission of Mitochondrial Haplotypes in Natural Populations of Field Mice with XY Females (GenusAkodon). American Naturalist, 2003, 161, 29-39.	1.0	4
96	The secret of a natural blond. Nature Genetics, 2014, 46, 660-661.	9.4	4
97	Ecological Genetics: A Key Gene for Mimicry and Melanism. Current Biology, 2016, 26, R802-R804.	1.8	3
98	Fishing for the genetic basis of migratory behavior. Cell, 2021, 184, 303-305.	13.5	3
99	AN UNUSUAL SEX-DETERMINATION SYSTEM IN SOUTH AMERICAN FIELD MICE (GENUS AKODON): THE ROLE OF MUTATION, SELECTION, AND MEIOTIC DRIVE IN MAINTAINING XY FEMALES. Evolution; International Journal of Organic Evolution, 2001, 55, 190.	1.1	2
100	Developmental genetics in emerging rodent models: case studies and perspectives. Current Opinion in Genetics and Development, 2016, 39, 182-186.	1.5	2
101	Dietâ€based assortative mating through sexual imprinting. Ecology and Evolution, 2019, 9, 12045-12050.	0.8	1