Federico G Hoffmann

List of Publications by Year
in descending order

90 papers	4,975 citations	101384 36 h-index	106150 65 g-index
103 all docs	103 docs citations	103 times ranked	6171 citing authors

#	Article	IF	Citations
1	Comparative genomics reveals insights into avian genome evolution and adaptation. Science, 2014, 346, 1311-1320.	6.0	895
2	Three crocodilian genomes reveal ancestral patterns of evolution among archosaurs. Science, 2014, 346, 1254449.	6.0	300
3	The Burmese python genome reveals the molecular basis for extreme adaptation in snakes. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 20645-20650.	3.3	260
4	Predictable convergence in hemoglobin function has unpredictable molecular underpinnings. Science, 2016, 354, 336-339.	6.0	206
5	The Molecular Basis of High-Altitude Adaptation in Deer Mice. PLoS Genetics, 2007, 3, e45.	1.5	173
6	Gene duplication, genome duplication, and the functional diversification of vertebrate globins. Molecular Phylogenetics and Evolution, 2013, 66, 469-478.	1.2	110
7	Androglobin: A Chimeric Globin in Metazoans That Is Preferentially Expressed in Mammalian Testes. Molecular Biology and Evolution, 2012, 29, 1105-1114.	3.5	98
8	Whole-Genome Duplication and the Functional Diversification of Teleost Fish Hemoglobins. Molecular Biology and Evolution, 2013, 30, 140-153.	3.5	95
9	Epistasis Constrains Mutational Pathways of Hemoglobin Adaptation in High-Altitude Pikas. Molecular Biology and Evolution, 2015, 32, 287-298.	3.5	95
10	Comparative phylogeography of shortâ€tailed bats (Carollia : Phyllostomidae). Molecular Ecology, 2003, 12, 3403-3414.	2.0	89
11	Whole-Genome Duplications Spurred the Functional Diversification of the Globin Gene Superfamily in Vertebrates. Molecular Biology and Evolution, 2012, 29, 303-312.	3.5	88
12	Intraspecific Polymorphism, Interspecific Divergence, and the Origins of Function-Altering Mutations in Deer Mouse Hemoglobin. Molecular Biology and Evolution, 2015, 32, 978-997.	3.5	88
13	Rapid Rates of Lineage-Specific Gene Duplication and Deletion in the Î±-Globin Gene Family. Molecular Biology and Evolution, 2008, 25, 591-602.	3.5	78
14	Divergent and parallel routes of biochemical adaptation in high-altitude passerine birds from the Qinghai-Tibet Plateau. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 1865-1870.	3.3	74
15	Molecular Adaptations for Sensing and Securing Prey and Insight into Amniote Genome Diversity from the Garter Snake Genome. Genome Biology and Evolution, 2018, 10, 2110-2129.	1.1	72
16	Gene cooption and convergent evolution of oxygen transport hemoglobins in jawed and jawless vertebrates. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 14274-14279.	3.3	71
17	AN EVOLUTIONARY EXPRESSED SEQUENCE TAG ANALYSIS OF DROSOPHILA SPERMATHECA GENES. Evolution; International Journal of Organic Evolution, 2008, 62, 2936-2947.	1.1	67
18	Differential loss of embryonic globin genes during the radiation of placental mammals. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 12950-12955.	3.3	64

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19	Differential Loss and Retention of Cytoglobin, Myoglobin, and Globin-E during the Radiation of Vertebrates. Genome Biology and Evolution, 2011, 3, 588-600.	1.1	64
20	Multiple Lineages of Ancient CR1 Retroposons Shaped the Early Genome Evolution of Amniotes. Genome Biology and Evolution, 2015, 7, 205-217.	1.1	62
21	Large Numbers of Novel miRNAs Originate from DNA Transposons and Are Coincident with a Large Species Radiation in Bats. Molecular Biology and Evolution, 2014, 31, 1536-1545.	3.5	60
22	Lineage-Specific Patterns of Functional Diversification in the Â- and Â-Globin Gene Families of Tetrapod Vertebrates. Molecular Biology and Evolution, 2010, 27, 1126-1138.	3.5	58
23	Complex Signatures of Selection and Gene Conversion in the Duplicated Globin Genes of House Mice. Genetics, 2007, 177, 481-500.	1.2	57
24	Genomic evidence for independent origins of Î²-like globin genes in monotremes and therian mammals. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 1590-1595.	3.3	57
25	Evolution of the Globin Gene Family in Deuterostomes: Lineage-Specific Patterns of Diversification and Attrition. Molecular Biology and Evolution, 2012, 29, 1735-1745.	3.5	54
26	mtDNA perspective of chromosomal diversification and hybridization in Petersâ€™ tentâ€making bat () Tj ETQq0 0 0 rgBT /Overlock 10	2.0	47
27	Phylogenetic diversification of the globin gene superfamily in chordates. IUBMB Life, 2011, 63, 313-322.	1.5	47
28	The Î±D-Globin Gene Originated via Duplication of an Embryonic Î±-Like Globin Gene in the Ancestor of Tetrapod Vertebrates. Molecular Biology and Evolution, 2007, 24, 1982-1990.	3.5	46
29	Characterization of HIV-1 subtype C envelope glycoproteins from perinatally infected children with different courses of disease. Retrovirology, 2006, 3, 73.	0.9	44
30	Repeated Evolution of Chimeric Fusion Genes in the Î²-Globin Gene Family of Laurasiatherian Mammals. Genome Biology and Evolution, 2014, 6, 1219-1233.	1.1	44
31	Ancient Duplications and Expression Divergence in the Globin Gene Superfamily of Vertebrates: Insights from the Elephant Shark Genome and Transcriptome. Molecular Biology and Evolution, 2015, 32, 1684-1694.	3.5	44
32	New Genes Originated via Multiple Recombinational Pathways in the Â-Globin Gene Family of Rodents. Molecular Biology and Evolution, 2008, 25, 2589-2600.	3.5	43
33	SYSTEMATICS OF BATS OF THE GENUS GLOSSOPHAGA (CHIROPTERA: PHYLLOSTOMIDAE) AND PHYLOGEOGRAPHY IN G. SORICINA BASED ON THE CYTOCHROME-bGENE. Journal of Mammalogy, 2001, 82, 1092-1101.	0.6	42
34	Gene Turnover in the Avian Globin Gene Families and Evolutionary Changes in Hemoglobin Isoform Expression. Molecular Biology and Evolution, 2015, 32, 871-887.	3.5	40
35	Genetically based low oxygen affinities of felid hemoglobins: lack of biochemical adaptation to high-altitude hypoxia in the snow leopard. Journal of Experimental Biology, 2015, 218, 2402-2409.	0.8	40
36	Largeâ€scale genome sampling reveals unique immunity and metabolic adaptations in bats. Molecular Ecology, 2021, 30, 6449-6467.	2.0	40

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37	Resolution of the laurasiatherian phylogeny: Evidence from genomic data. Molecular Phylogenetics and Evolution, 2012, 64, 685-689.	1.2	39
38	The Globin Gene Repertoire of Lampreys: Convergent Evolution of Hemoglobin and Myoglobin in Jawed and Jawless Vertebrates. Molecular Biology and Evolution, 2014, 31, 2708-2721.	3.5	39
39	Altitudinal Variation at Duplicated Î²-Globin Genes in Deer Mice: Effects of Selection, Recombination, and Gene Conversion. Genetics, 2012, 190, 203-216.	1.2	37
40	Hemoglobin isoform differentiation and allosteric regulation of oxygen binding in the turtle,Trachemys scripta. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2013, 305, R961-R967.	0.9	36
41	Bovine herpesvirus 1 productive infection and immediate early transcription unit 1 promoter are stimulated by the synthetic corticosteroid dexamethasone. Virology, 2015, 484, 377-385.	1.1	36
42	Restricted Genetic Diversity of HIV-1 Subtype C Envelope Glycoprotein from Perinatally Infected Zambian Infants. PLoS ONE, 2010, 5, e9294.	1.1	36
43	Comparative genomics of proteins involved in RNA nucleocytoplasmic export. BMC Evolutionary Biology, 2011, 11, 7.	3.2	34
44	Molecular dating of the diversification of Phyllostominae bats based on nuclear and mitochondrial DNA sequences. Molecular Phylogenetics and Evolution, 2008, 49, 653-658.	1.2	32
45	Molecular Evolution and Functional Divergence of Trace Amineâ€“Associated Receptors. PLoS ONE, 2016, 11, e0151023.	1.1	31
46	Transposable Element Targeting by piRNAs in Laurasiatherians with Distinct Transposable Element Histories. Genome Biology and Evolution, 2016, 8, 1327-1337.	1.1	30
47	Adaptive Functional Divergence Among Triplicated Î±-Globin Genes in Rodents. Genetics, 2008, 178, 1623-1638.	1.2	29
48	Phylogenetic characterization of hantaviruses from wild rodents and hantavirus pulmonary syndrome cases in the state of Parana (southern Brazil). Journal of General Virology, 2009, 90, 2166-2171.	1.3	29
49	Oxygenation properties and isoform diversity of snake hemoglobins. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2015, 309, R1178-R1191.	0.9	29
50	Contrasting patterns of evolutionary diversification in the olfactory repertoires of reptile and bird genomes. Genome Biology and Evolution, 2016, 8, evw013.	1.1	28
51	Molecular Phylogenetics of the Phyllostomid Bat Genus micronycteris with Descriptions of Two New Subgenera. Journal of Mammalogy, 2007, 88, 1205-1215.	0.6	27
52	Evolution of the Relaxin/Insulin-like Gene Family in Placental Mammals: Implications for Its Early Evolution. Journal of Molecular Evolution, 2011, 72, 72-79.	0.8	27
53	Developmental regulation of hemoglobin synthesis in the green anole lizard Anolis carolinensis. Journal of Experimental Biology, 2011, 214, 575-581.	0.8	26
54	Evolution of subtype C HIV-1 Env in a slowly progressing Zambian infant. Retrovirology, 2005, 2, 67.	0.9	25

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55	Evolutionary history of the reprimo tumor suppressor gene family in vertebrates with a description of a new reprimo gene lineage. Gene, 2016, 591, 245-254.	1.0	24
56	Evidence for the co-circulation of dengue virus type 3 genotypes III and V in the Northern region of Brazil during the 2002-2004 epidemics. Memorias Do Instituto Oswaldo Cruz, 2008, 103, 483-488.	0.8	24
57	Evidence of circulation of Laguna Negra-like hantavirus in the Central West of Brazil: Case report. Journal of Clinical Virology, 2009, 45, 153-156.	1.6	23
58	Genetic and biological characterization of a densovirus isolate that affects dengue virus infection. Memorias Do Instituto Oswaldo Cruz, 2011, 106, 285-292.	0.8	23
59	Gene Turnover and Diversification of the Î±- and Î²-Globin Gene Families in Sauropsid Vertebrates. Genome Biology and Evolution, 2018, 10, 344-358.	1.1	23
60	Jhe in Gryllus assimilis: Cloning, sequence-activity associations and phylogeny. Insect Biochemistry and Molecular Biology, 2007, 37, 1359-1365.	1.2	22
61	Integration of molecular cytogenetics, dated molecular phylogeny, and model-based predictions to understand the extreme chromosome reorganization in the Neotropical genus Tonatia (Chiroptera:) Tj ETQq1 1 0.784314 rgBT /Overlo	3.4	21
62	Toward a more holistic method of genome assembly assessment. BMC Bioinformatics, 2020, 21, 249.	1.2	20
63	SYSTEMATICS OF OXYMYCTERUS WITH DESCRIPTION OF A NEW SPECIES FROM URUGUAY. Journal of Mammalogy, 2002, 83, 408-420.	0.6	19
64	Early Evolution of Vertebrate Mybs: An Integrative Perspective Combining Synteny, Phylogenetic, and Gene Expression Analyses. Genome Biology and Evolution, 2015, 7, 3009-3021.	1.1	19
65	Wnt Genes in Wing Pattern Development of Coliadinae Butterflies. Frontiers in Ecology and Evolution, 2020, 8, .	1.1	19
66	Stage-specific transcriptomic analysis of the model cestode Hymenolepis microstoma. Genomics, 2021, 113, 620-632.	1.3	15
67	Gene turnover and differential retention in the relaxin/insulin-like gene family in primates. Molecular Phylogenetics and Evolution, 2012, 63, 768-776.	1.2	14
68	Evolution of the Î²-adrenoreceptors in vertebrates. General and Comparative Endocrinology, 2017, 240, 129-137.	0.8	14
69	Evolution of the Relaxin/Insulin-Like Gene Family in Anthropoid Primates. Genome Biology and Evolution, 2014, 6, 491-499.	1.1	13
70	Genetic variation in motherâ€“child acute seroconverter pairs from Zambia. Aids, 2008, 22, 817-824.	1.0	12
71	Conversion events in gene clusters. BMC Evolutionary Biology, 2011, 11, 226.	3.2	12
72	Progressive erosion of the Relaxin1 gene in bovids. General and Comparative Endocrinology, 2017, 252, 12-17.	0.8	12

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73	Structure and function of crocodilian hemoglobins and allosteric regulation by chloride, ATP, and CO₂. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2020, 318, R657-R667.	0.9	12
74	Molecular adaptive convergence in the Î±-globin gene in subterranean octodontid rodents. Gene, 2017, 628, 275-280.	1.0	11
75	Evolution of nodal and nodalâ€related genes and the putative composition of the heterodimers that trigger the nodal pathway in vertebrates. Evolution & Development, 2019, 21, 205-217.	1.1	11
76	INSL4 Pseudogenes Help Define the Relaxin Family Repertoire in the Common Ancestor of Placental Mammals. Journal of Molecular Evolution, 2012, 75, 73-78.	0.8	10
77	Curvularia malina sp. nov. incites a new disease of warm-season turfgrasses in the southeastern United States. Mycologia, 2016, 108, 915-924.	0.8	10
78	Magnaporthiopsis cynodontis, a novel turfgrass pathogen with widespread distribution in the United States. Mycologia, 2020, 112, 52-63.	0.8	10
79	A comparative study of HIV-1 clade C env evolution in a Zambian infant with an infected rhesus macaque during disease progression. Aids, 2009, 23, 1817-1828.	1.0	8
80	The Globin Gene Family in Arthropods: Evolution and Functional Diversity. Frontiers in Genetics, 2020, 11, 858.	1.1	8
81	Evolved increases in hemoglobin-oxygen affinity and the Bohr effect coincided with the aquatic specialization of penguins. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	8
82	Gene Duplication and Positive Selection Explains Unusual Physiological Roles of the Relaxin Gene in the European Rabbit. Journal of Molecular Evolution, 2012, 74, 52-60.	0.8	7
83	Evolution of the ABPA Subunit of Androgen-Binding Protein Expressed in the Submaxillary Glands in New and Old World Rodent Taxa. Journal of Molecular Evolution, 2013, 76, 324-331.	0.8	7
84	Transposable elements and small RNAs: Genomic fuel for species diversity. Mobile Genetic Elements, 2015, 5, 63-66.	1.8	7
85	Oxygenation properties of hemoglobin and the evolutionary origins of isoform multiplicity in an amphibious air-breathing fish, the blue-spotted mudskipper (Boleophthalmus pectinirostris). Journal of Experimental Biology, 2020, 223, .	0.8	7
86	Evolutionary history of the vertebrate Piwi gene family. PeerJ, 2021, 9, e12451.	0.9	7
87	Whole-Genome Duplications and the Diversification of the Globin-X Genes of Vertebrates. Genome Biology and Evolution, 2021, 13, .	1.1	5
88	Evolution of the DAN gene family in vertebrates. Developmental Biology, 2022, 482, 34-43.	0.9	4
89	The PIWI/piRNA response is relaxed in a rodent that lacks mobilizing transposable elements. Rna, 2022, 28, 609-621.	1.6	3
90	Gaeumannomyces nanograminis, sp. nov., a hyphopodiate fungus identified from diseased roots of ultradwarf bermudagrass in the United States. Mycologia, 2021, 113, 1-11.	0.8	2