Arkhat Abzhanov

List of Publications by Year
in descending order

49 papers	3,601 citations	236925 25 h-index	223800 46 g-index
50 all docs	50 docs citations	50 times ranked	3467 citing authors

#	Article	IF	Citations
1	<i>Bmp4</i> and Morphological Variation of Beaks in Darwin's Finches. Science, 2004, 305, 1462-1465.	12.6	706
2	The calmodulin pathway and evolution of elongated beak morphology in Darwin's finches. Nature, 2006, 442, 563-567.	27.8	564
3	Birds have paedomorphic dinosaur skulls. Nature, 2012, 487, 223-226.	27.8	207
4	Regulation of skeletogenic differentiation in cranial dermal bone. Development (Cambridge), 2007, 134, 3133-3144.	2.5	195
5	Two developmental modules establish 3D beak-shape variation in Darwin's finches. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 4057-4062.	7.1	167
6	Shh and Fgf8 act synergistically to drive cartilage outgrowth during cranial development. Developmental Biology, 2004, 273, 134-148.	2.0	137
7	Homologs of Drosophila Appendage Genes in the Patterning of Arthropod Limbs. Developmental Biology, 2000, 227, 673-689.	2.0	130
8	Dissimilar regulation of cell differentiation in mesencephalic (cranial)and sacral (trunk) neural crest cells in vitro. Development (Cambridge), 2003, 130, 4567-4579.	2.5	120
9	Are we there yet? Tracking the development of new model systems. Trends in Genetics, 2008, 24, 353-360.	6.7	109
10	ROLES FOR MODULARITY AND CONSTRAINT IN THE EVOLUTION OF CRANIAL DIVERSITY AMONG<i>ANOLIS</i>LIZARDS. Evolution; International Journal of Organic Evolution, 2012, 66, 1525-1542.	2.3	109
11	Chelicerate Hox genes and the homology of arthropod segments. Evolution & Development, 1999, 1, 77-89.	2.0	90
12	A molecular mechanism for the origin of a key evolutionary innovation, the bird beak and palate, revealed by an integrative approach to major transitions in vertebrate history. Evolution; International Journal of Organic Evolution, 2015, 69, 1665-1677.	2.3	90
13	Cranial shape evolution in adaptive radiations of birds: comparative morphometrics of Darwin's finches and Hawaiian honeycreepers. Philosophical Transactions of the Royal Society B: Biological Sciences, 2017, 372, 20150481.	4.0	89
14	Closely related bird species demonstrate flexibility between beak morphology and underlying developmental programs. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 16222-16227.	7.1	83
15	CONVERGENT EVOLUTION OF SEXUAL DIMORPHISM IN SKULL SHAPE USING DISTINCT DEVELOPMENTAL STRATEGIES. Evolution; International Journal of Organic Evolution, 2013, 67, 2180-2193.	2.3	79
16	The skull roof tracks the brain during the evolution and development of reptiles including birds. Nature Ecology and Evolution, 2017, 1, 1543-1550.	7.8	77
17	von Baer's law for the ages: lost and found principles of developmental evolution. Trends in Genetics, 2013, 29, 712-722.	6.7	74
18	Embryonic expression patterns of the Hox genes of the crayfishProcambarus clarkii(Crustacea,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62	2.0	53

#	Article	IF	Citations
19	Heterochronic shifts and conserved embryonic shape underlie crocodylian craniofacial disparity and convergence. Proceedings of the Royal Society B: Biological Sciences, 2019, 286, 20182389.	2.6	52
20	Shared developmental programme strongly constrains beak shape diversity in songbirds. Nature Communications, 2014, 5, 3700.	12.8	46
21	Insights into the evolution of Darwinâ€™s finches from comparative analysis of the Geospiza magnirostris genome sequence. BMC Genomics, 2013, 14, 95.	2.8	38
22	Paths Less Traveled: Evo-Devo Approaches to Investigating Animal Morphological Evolution. Annual Review of Cell and Developmental Biology, 2012, 28, 743-763.	9.4	37
23	The old and new faces of morphology: the legacy of D'Arcy Thompson's â€˜theory of transformations' and â€˜laws of growth'. Development (Cambridge), 2017, 144, 4284-4297.	2.5	37
24	A review of the osteoderms of lizards (Reptilia: Squamata). Biological Reviews, 2022, 97, 1-19.	10.4	28
25	Crossâ€"regulatory interactions between <i>Fgf8</i> and <i>Shh</i> in the avian frontonasal prominence. Congenital Anomalies (discontinued), 2007, 47, 136-148.	0.6	27
26	Peramorphosis, an evolutionary developmental mechanism in neotropical bat skull diversity. Developmental Dynamics, 2019, 248, 1129-1143.	1.8	27
27	Development of beak polymorphism in the African seedcracker,<i>Pyrenestes ostrinus</i>. Evolution & Development, 2009, 11, 636-646.	2.0	25
28	Darwin's GalÃ¡pagos finches in modern biology. Philosophical Transactions of the Royal Society B: Biological Sciences, 2010, 365, 1001-1007.	4.0	25
29	Rapid adaptive radiation of Darwinâ€™s finches depends on ancestral genetic modules. Science Advances, 2022, 8, .	10.3	18
30	Ecological and morphological determinants of evolutionary diversification in Darwin's finches and their relatives. Ecology and Evolution, 2020, 10, 14020-14032.	1.9	17
31	Evolutionary and ontogenetic changes of the anatomical organization and modularity in the skull of archosaurs. Scientific Reports, 2020, 10, 16138.	3.3	15
32	Differential cellular proliferation underlies heterochronic generation of cranial diversity in phyllostomid bats. EvoDevo, 2020, 11, 11.	3.2	15
33	A multispecies BCO2 beak color polymorphism in the Darwinâ€™s finch radiation. Current Biology, 2021, 31, 5597-5604.e7.	3.9	14
34	Molecular characterization of dental development in a toothed archosaur, the American alligator <i>Alligator mississippiensis</i>. Evolution & Development, 2013, 15, 393-405.	2.0	13
35	Time to synchronize our clocks: Connecting developmental mechanisms and evolutionary consequences of heterochrony. Journal of Experimental Zoology Part B: Molecular and Developmental Evolution, 2022, 338, 87-106.	1.3	13
36	Collection of Embryos from Darwinâ€™s Finches (Thraupidae, Passeriformes). Cold Spring Harbor Protocols, 2009, 2009, pdb.prot5174.	0.3	9

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37	Recapitulating cranial osteogenesis with neural crest cells in 3-D microenvironments. Acta Biomaterialia, 2016, 31, 301-311.	8.3	9
38	Developmental origins of the crocodylian skull table and platyrostral face. Anatomical Record, 2022, 305, 2838-2853.	1.4	9
39	Geometry and dynamics link form, function, and evolution of finch beaks. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	9
40	Darwinâ€™s Finches: Analysis of Beak Morphological Changes During Evolution: Figure 1.. Cold Spring Harbor Protocols, 2009, 2009, pdb.emo119.	0.3	8
41	In Situ Hybridization Analysis of Embryonic Beak Tissue from Darwinâ€™s Finches. Cold Spring Harbor Protocols, 2009, 2009, pdb.prot5175.	0.3	7
42	Lizard osteoderms â€" Morphological characterisation, biomimetic designÂand manufacturing based on three species. Bioinspiration and Biomimetics, 2021, 16, 066011.	2.9	6
43	Unravelling the structural variation of lizard osteoderms. Acta Biomaterialia, 2022, 146, 306-316.	8.3	6
44	Microarray Analysis of Embryonic Beak mRNA from Darwin's Finches. Cold Spring Harbor Protocols, 2009, 2009, pdb.prot5176-pdb.prot5176.	0.3	4
45	Sex identification in embryos and adults of Darwinâ€™s finches. PLoS ONE, 2021, 16, e0237687.	2.5	4
46	Heading for higher ground: Developmental origins and evolutionary diversification of the amniote face. Current Topics in Developmental Biology, 2021, 141, 241-277.	2.2	3
47	Embryonic origins of the flattened skull table and snout in Crocodylia. FASEB Journal, 2021, 35, .	0.5	0
48	Pecking at the origin of vertebrate diversity: insights from the beak of the finch. FASEB Journal, 2009, 23, 15.2.	0.5	0
49	Developmental mechanisms for morphological evolution. FASEB Journal, 2013, 27, 14.4.	0.5	0