

# Angela Fago

## List of Publications by Year in descending order

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140  
papers

6,163  
citations

61857

43  
h-index

82410

72  
g-index

151  
all docs

151  
docs citations

151  
times ranked

4799  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Neuroglobin and cytoglobin in search of their role in the vertebrate globin family. <i>Journal of Inorganic Biochemistry</i> , 2005, 99, 110-119.  | 1.5 | 286       |
| 2  | Reactivity Studies of the Fe(III) and Fe(II)NO Forms of Human Neuroglobin Reveal a Potential Role against Oxidative Stress. <i>Journal of Biological Chemistry</i> , 2004, 279, 22841-22847.   | 1.6 | 233       |
| 3  | Predictable convergence in hemoglobin function has unpredictable molecular underpinnings. <i>Science</i> , 2016, 354, 336-339.   | 6.0 | 206       |
| 4  | Evolutionary and functional insights into the mechanism underlying high-altitude adaptation of deer mouse hemoglobin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 14450-14455. | 3.3 | 202       |
| 5  | Generation of nitric oxide from nitrite by carbonic anhydrase: a possible link between metabolic activity and vasodilation. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2009, 297, H2068-H2074.         | 1.5 | 182       |
| 6  | Epistasis Among Adaptive Mutations in Deer Mouse Hemoglobin. <i>Science</i> , 2013, 340, 1324-1327.  | 6.0 | 174       |
| 7  | Allosteric Regulation and Temperature Dependence of Oxygen Binding in Human Neuroglobin and Cytoglobin. <i>Journal of Biological Chemistry</i> , 2004, 279, 44417-44426.   | 1.6 | 160       |
| 8  | Repeated elevational transitions in hemoglobin function during the evolution of Andean hummingbirds. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 20669-20674.                  | 3.3 | 149       |
| 9  | Reactions of ferrous neuroglobin and cytoglobin with nitrite under anaerobic conditions. <i>Journal of Inorganic Biochemistry</i> , 2008, 102, 1777-1782.  | 1.5 | 140       |
| 10 | The reaction of neuroglobin with potential redox protein partners cytochrome b 5 and cytochrome c. <i>FEBS Letters</i> , 2006, 580, 4884-4888.   | 1.3 | 125       |
| 11 | Genetic differences in hemoglobin function between highland and lowland deer mice. <i>Journal of Experimental Biology</i> , 2010, 213, 2565-2574.  | 0.8 | 124       |
| 12 | Functional adaptation and its molecular basis in vertebrate hemoglobins, neuroglobins and cytoglobins. <i>Respiratory Physiology and Neurobiology</i> , 2004, 144, 141-159.  | 0.7 | 117       |
| 13 | Functional Properties of Neuroglobin and Cytoglobin. Insights into the Ancestral Physiological Roles of Globins. <i>IUBMB Life</i> , 2004, 56, 689-696.  | 1.5 | 107       |
| 14 | Convergent Evolution of Hemoglobin Function in High-Altitude Andean Waterfowl Involves Limited Parallelism at the Molecular Sequence Level. <i>PLoS Genetics</i> , 2015, 11, e1005681.   | 1.5 | 103       |
| 15 | Nitrite-dependent vasodilation is facilitated by hypoxia and is independent of known NO-generating nitrite reductase activities. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2007, 292, H3072-H3078.    | 1.5 | 100       |
| 16 | Epistasis Constrains Mutational Pathways of Hemoglobin Adaptation in High-Altitude Pikas. <i>Molecular Biology and Evolution</i> , 2015, 32, 287-298.  | 3.5 | 95        |
| 17 | Intraspecific Polymorphism, Interspecific Divergence, and the Origins of Function-Altering Mutations in Deer Mouse Hemoglobin. <i>Molecular Biology and Evolution</i> , 2015, 32, 978-997.   | 3.5 | 88        |
| 18 | Contribution of a mutational hot spot to hemoglobin adaptation in high-altitude Andean house wrens. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 13958-13963.                   | 3.3 | 86        |

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|----|--|-----|-----------|
| 19 | Reactions of peroxynitrite with globin proteins and their possible physiological role. <i>Comparative Biochemistry and Physiology Part A, Molecular &amp; Integrative Physiology</i> , 2005, 142, 124-129.   | 0.8 | 75        |
| 20 | Divergent and parallel routes of biochemical adaptation in high-altitude passerine birds from the Qinghai-Tibet Plateau. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 1865-1870.                        | 3.3 | 74        |
| 21 | Modulation of red cell glycolysis: interactions between vertebrate hemoglobins and cytoplasmic domains of band 3 red cell membrane proteins. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2004, 287, R454-R464. | 0.9 | 67        |
| 22 | Hemoglobin Structure and Function. <i>Fish Physiology</i> , 1998, 17, 1-40.  | 0.2 | 60        |
| 23 | A role for neuroglobin: Resetting the trigger level for apoptosis in neuronal and retinal cells. <i>IUBMB Life</i> , 2008, 60, 398-401.  | 1.5 | 60        |
| 24 | Integrating Evolutionary and Functional Tests of Adaptive Hypotheses: A Case Study of Altitudinal Differentiation in Hemoglobin Function in an Andean Sparrow, <i>Zonotrichia capensis</i> . <i>Molecular Biology and Evolution</i> , 2014, 31, 2948-2962.     | 3.5 | 59        |
| 25 | Molecular basis of hemoglobin adaptation in the high-flying bar-headed goose. <i>PLoS Genetics</i> , 2018, 14, e1007331.   | 1.5 | 58        |
| 26 | Hypoxia Tolerance, Nitric Oxide, and Nitrite: Lessons From Extreme Animals. <i>Physiology</i> , 2015, 30, 116-126.   | 1.6 | 57        |
| 27 | A Membrane-Bound Vertebrate Globin. <i>PLoS ONE</i> , 2011, 6, e25292.   | 1.1 | 56        |
| 28 | Reactions of ferric hemoglobin and myoglobin with hydrogen sulfide under physiological conditions. <i>Journal of Inorganic Biochemistry</i> , 2018, 182, 133-140.  | 1.5 | 54        |
| 29 | The Cathodic Hemoglobin of <i>Anguilla anguilla</i> . <i>Journal of Biological Chemistry</i> , 1995, 270, 18897-18902.   | 1.6 | 53        |
| 30 | Keeping the heart in balance: the functional interactions of myoglobin with nitrogen oxides. <i>Journal of Experimental Biology</i> , 2010, 213, 2726-2733.  | 0.8 | 52        |
| 31 | Metabolic adaptations during extreme anoxia in the turtle heart and their implications for ischemia-reperfusion injury. <i>Scientific Reports</i> , 2019, 9, 2850.   | 1.6 | 52        |
| 32 | Effects of short-term hypoxia on neuroglobin levels and localization in mouse brain tissues. <i>Neuropathology and Applied Neurobiology</i> , 2005, 31, 610-617.   | 1.8 | 50        |
| 33 | Novel mechanism for high-altitude adaptation in hemoglobin of the Andean frog <i>Telmatobius peruvianus</i> . <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2002, 283, R1052-R1060.                              | 0.9 | 49        |
| 34 | Stability-Mediated Epistasis Restricts Accessible Mutational Pathways in the Functional Evolution of Avian Hemoglobin. <i>Molecular Biology and Evolution</i> , 2017, 34, 1240-1251.   | 3.5 | 49        |
| 35 | Roles of nitric oxide, nitrite and myoglobin on myocardial efficiency in trout ( <i>Oncorhynchus mykiss</i> ) and goldfish ( <i>Carassius auratus</i> ): implications for hypoxia tolerance. <i>Journal of Experimental Biology</i> , 2010, 213, 2755-2762.    | 0.8 | 48        |
| 36 | Functional differentiation of myoglobin isoforms in hypoxia-tolerant carp indicates tissue-specific protective roles. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2012, 302, R693-R701.                        | 0.9 | 48        |

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|----|---|-----|-----------|
| 37 | The Unique Hemoglobin System of <i>Pleuragramma antarcticum</i> , an Antarctic Migratory Teleost. <i>Journal of Biological Chemistry</i> , 1996, 271, 23780-23785.  | 1.6 | 46        |
| 38 | The Anodic Hemoglobin of <i>Anguilla anguilla</i> . <i>Journal of Biological Chemistry</i> , 1997, 272, 15628-15635.  | 1.6 | 46        |
| 39 | Isohemoglobin Differentiation in the Bimodal-breathing Amazon Catfish <i>Hoplosternum littorale</i> . <i>Journal of Biological Chemistry</i> , 2000, 275, 17297-17305.  | 1.6 | 46        |
| 40 | Expression and Purification of Recombinant Hemoglobin in <i>Escherichia coli</i> . <i>PLoS ONE</i> , 2011, 6, e20176.   | 1.1 | 46        |
| 41 | Temperature-Dependent Enthalpy of Oxygenation in Antarctic Fish Hemoglobins. <i>Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology</i> , 1997, 118, 319-326.  | 0.7 | 45        |
| 42 | Hemoglobin and subunit multiplicity in the rainbow trout ( <i>Oncorhynchus mykiss</i> ) hemoglobin system. <i>Fish Physiology and Biochemistry</i> , 2001, 24, 335-342.   | 0.9 | 45        |
| 43 | The hemoglobins of <i>Notothenia angustata</i> , a temperate fish belonging to a family largely endemic to the Antarctic Ocean. <i>FEBS Journal</i> , 1992, 210, 963-970.   | 0.2 | 43        |
| 44 | The reactions of neuroglobin with CO: Evidence for two forms of the ferrous protein. <i>Journal of Inorganic Biochemistry</i> , 2006, 100, 1339-1343.   | 1.5 | 43        |
| 45 | Students' motivation toward laboratory work in physiology teaching. <i>American Journal of Physiology - Advances in Physiology Education</i> , 2016, 40, 313-318.   | 0.8 | 41        |
| 46 | Hemoglobin function and allosteric regulation in semi-fossorial rodents (family Sciuridae) with different altitudinal ranges. <i>Journal of Experimental Biology</i> , 2013, 216, 4264-4271.  | 0.8 | 40        |
| 47 | Genetically based low oxygen affinities of felid hemoglobins: lack of biochemical adaptation to high-altitude hypoxia in the snow leopard. <i>Journal of Experimental Biology</i> , 2015, 218, 2402-2409.   | 0.8 | 40        |
| 48 | The case of the missing NO- hemoglobin: Spectral changes suggestive of heme redox reactions reflect changes in NO- heme geometry. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 12087-12092.    | 3.3 | 39        |
| 49 | Integrating nitric oxide, nitrite and hydrogen sulfide signaling in the physiological adaptations to hypoxia: A comparative approach. <i>Comparative Biochemistry and Physiology Part A, Molecular &amp; Integrative Physiology</i> , 2012, 162, 1-6. | 0.8 | 39        |
| 50 | Expression patterns and adaptive functional diversity of vertebrate myoglobins. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2013, 1834, 1832-1839.   | 1.1 | 39        |
| 51 | Suppression of reactive oxygen species generation in heart mitochondria from anoxic turtles: the role of complex I S-nitrosation. <i>Journal of Experimental Biology</i> , 2018, 221, .   | 0.8 | 39        |
| 52 | The Nerve Hemoglobin of the Bivalve Mollusc <i>Spisula solidissima</i> . <i>Journal of Biological Chemistry</i> , 2006, 281, 5364-5372.   | 1.6 | 36        |
| 53 | Hemoglobin isoform differentiation and allosteric regulation of oxygen binding in the turtle, <i>Trachemys scripta</i> . <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2013, 305, R961-R967.            | 0.9 | 36        |
| 54 | The <i>Staphylococcus aureus</i> Protein IsdH Inhibits Host Hemoglobin Scavenging to Promote Heme Acquisition by the Pathogen. <i>Journal of Biological Chemistry</i> , 2016, 291, 23989-23998.   | 1.6 | 36        |

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|----|---|-----|-----------|
| 55 | Phenotypic plasticity in blood-oxygen transport in highland and lowland deer mice. <i>Journal of Experimental Biology</i> , 2013, 216, 1167-73.   | 0.8 | 33        |
| 56 | Functional properties of myoglobins from five whale species with different diving capacities. <i>Journal of Experimental Biology</i> , 2012, 215, 3403-10.  | 0.8 | 33        |
| 57 | Lack of conventional oxygen-linked proton and anion binding sites does not impair allosteric regulation of oxygen binding in dwarf caiman hemoglobin. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2013, 305, R300-R312. | 0.9 | 33        |
| 58 | Hydrogen sulfide and nitric oxide metabolites in the blood of free-ranging brown bears and their potential roles in hibernation. <i>Free Radical Biology and Medicine</i> , 2014, 73, 349-357.  | 1.3 | 32        |
| 59 | A polymerising Root-effect fish hemoglobin with high subunit heterogeneity. Correlation with primary structure. <i>FEBS Journal</i> , 1993, 218, 829-835.   | 0.2 | 31        |
| 60 | Characterization of a Globin-coupled Oxygen Sensor with a Gene-regulating Function. <i>Journal of Biological Chemistry</i> , 2007, 282, 37325-37340.  | 1.6 | 30        |
| 61 | ATP-induced temperature independence of hemoglobin's O <sub>2</sub> affinity in heterothermic billfish. <i>Journal of Experimental Biology</i> , 2010, 213, 1579-1585.  | 0.8 | 30        |
| 62 | Oxygenation properties and isoform diversity of snake hemoglobins. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2015, 309, R1178-R1191.  | 0.9 | 29        |
| 63 | Allosteric mechanisms underlying the adaptive increase in hemoglobin-oxygen affinity of the bar-headed goose. <i>Journal of Experimental Biology</i> , 2018, 221, .   | 0.8 | 29        |
| 64 | The hemoglobin system of the hagfish <i>Myxine glutinosa</i> : aggregation state and functional properties. <i>BBA - Proteins and Proteomics</i> , 1995, 1249, 109-115.   | 2.1 | 27        |
| 65 | The Greenland shark <i>Somniosus microcephalus</i> 's Hemoglobins and ligand-binding properties. <i>PLoS ONE</i> , 2017, 12, e0186181.  | 1.1 | 27        |
| 66 | Metabolic adaptations to anoxia and reoxygenation: New lessons from freshwater turtles and crucian carp. <i>Current Opinion in Endocrine and Metabolic Research</i> , 2020, 11, 55-64.  | 0.6 | 26        |
| 67 | The primary structure and oxygen-binding properties of the single haemoglobin of the high-Antarctic fish <i>Aethotaxis mitopteryx</i> DeWitt. <i>Polar Biology</i> , 1992, 12, 135-140.   | 0.5 | 25        |
| 68 | Circulating nitric oxide metabolites and cardiovascular changes in the turtle <i>Trachemys scripta</i> during normoxia, anoxia and reoxygenation. <i>Journal of Experimental Biology</i> , 2012, 215, 2560-2566.  | 0.8 | 25        |
| 69 | Oxygenation properties and oxidation rates of mouse hemoglobins that differ in reactive cysteine content. <i>Comparative Biochemistry and Physiology Part A, Molecular &amp; Integrative Physiology</i> , 2012, 161, 265-270.   | 0.8 | 25        |
| 70 | Allosteric modulation by S-nitrosation in the low-O <sub>2</sub> affinity myoglobin from rainbow trout. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2011, 300, R101-R108.   | 0.9 | 24        |
| 71 | Bohr effect and temperature sensitivity of hemoglobins from highland and lowland deer mice. <i>Comparative Biochemistry and Physiology Part A, Molecular &amp; Integrative Physiology</i> , 2016, 195, 10-14.   | 0.8 | 24        |
| 72 | Evolutionary and Functional Properties of a Two-Locus $\beta^2$ -Globin Polymorphism in Indian House Mice. <i>Genetics</i> , 2010, 184, 1121-1131.  | 1.2 | 23        |

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|----|--|-----|-----------|
| 73 | Oxygen binding properties of non-mammalian nerve globins. <i>FEBS Journal</i> , 2006, 273, 1323-1329.  | 2.2 | 22        |
| 74 | High temperature impairs mitochondrial function in rainbow trout cardiac mitochondria. <i>Journal of Experimental Biology</i> , 2021, 224, .   | 0.8 | 22        |
| 75 | Globin-like proteins in <i>Caenorhabditis elegans</i> : in vivo localization, ligand binding and structural properties. <i>BMC Biochemistry</i> , 2010, 11, 17.  | 4.4 | 21        |
| 76 | High blood oxygen affinity in the air-breathing swamp eel <i>Monopterus albus</i> . <i>Comparative Biochemistry and Physiology Part A, Molecular &amp; Integrative Physiology</i> , 2014, 178, 102-108.  | 0.8 | 21        |
| 77 | Turtles maintain mitochondrial integrity but reduce mitochondrial respiratory capacity in the heart after cold-acclimation and anoxia. <i>Journal of Experimental Biology</i> , 2019, 222, .   | 0.8 | 21        |
| 78 | Hagfish Hemoglobins. <i>Journal of Biological Chemistry</i> , 2001, 276, 27415-27423.  | 1.6 | 20        |
| 79 | Thermodynamics of oxygenation-linked proton and lactate binding govern the temperature sensitivity of O <sub>2</sub> binding in crustacean ( <i>Carcinus maenas</i> ) hemocyanin. <i>Journal of Experimental Biology</i> , 2008, 211, 1057-1062. | 0.8 | 20        |
| 80 | Bicarbonate binding to hemoglobin links oxygen and carbon dioxide transport in hagfish. <i>Respiration Physiology</i> , 1999, 115, 309-315.  | 2.8 | 19        |
| 81 | Respiratory responses to short term hypoxia in the snapping turtle, <i>Chelydra serpentina</i> . <i>Comparative Biochemistry and Physiology Part A, Molecular &amp; Integrative Physiology</i> , 2000, 126, 223-231.                             | 0.8 | 18        |
| 82 | Nitric oxide increases myocardial efficiency in the hypoxia-tolerant turtle <i>Trachemys scripta</i> . <i>Journal of Experimental Biology</i> , 2009, 212, 954-960.  | 0.8 | 18        |
| 83 | Unusual stability of human neuroglobin at low pH – molecular mechanisms and biological significance. <i>FEBS Journal</i> , 2009, 276, 7027-7039.   | 2.2 | 17        |
| 84 | A Novel Possible Role for Met Hemoglobin as Carrier of Hydrogen Sulfide in the Blood. <i>Antioxidants and Redox Signaling</i> , 2020, 32, 258-265.   | 2.5 | 17        |
| 85 | Stable mitochondrial C1CIII2 supercomplex interactions in reptiles compared to homeothermic vertebrates. <i>Journal of Experimental Biology</i> , 2020, 223, .   | 0.8 | 17        |
| 86 | The haemoglobin system of the mudfish, <i>Labeo capensis</i> : adaptations to temperature and hypoxia. <i>Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology</i> , 1998, 120, 735-742.                               | 0.7 | 16        |
| 87 | Enthalpic partitioning of the reduced temperature sensitivity of O <sub>2</sub> binding in bovine hemoglobin. <i>Comparative Biochemistry and Physiology Part A, Molecular &amp; Integrative Physiology</i> , 2014, 176, 20-25.                  | 0.8 | 16        |
| 88 | Functional roles of globin proteins in hypoxia-tolerant ectothermic vertebrates. <i>Journal of Applied Physiology</i> , 2017, 123, 926-934.  | 1.2 | 16        |
| 89 | O <sub>2</sub> binding and CO <sub>2</sub> sensitivity in hemoglobins of subterranean African mole rats. <i>Journal of Experimental Biology</i> , 2017, 220, 3939-3948.  | 0.8 | 16        |
| 90 | Hypoxia enhances blood O <sub>2</sub> affinity and depresses skeletal muscle O <sub>2</sub> consumption in zebrafish ( <i>Danio rerio</i> ). <i>Journal of Experimental Biology</i> , 2017, 220, 18-25.  | 0.7 | 15        |

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|-----|---|-----|-----------|
| 91  | Allosteric Effect of Water in Fish and Human Hemoglobins. <i>Journal of Biological Chemistry</i> , 2003, 278, 42769-42773.  | 1.6 | 14        |
| 92  | Oxygen binding to partially nitrosylated hemoglobin. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2013, 1834, 1894-1900.  | 1.1 | 14        |
| 93  | Haematological studies on <i>Aethotaxis mitopteryx</i> DeWitt, a high-Antarctic fish with a single haemoglobin. <i>Polar Biology</i> , 1992, 12, 141-145.   | 0.5 | 13        |
| 94  | Oxygen binding by single red blood cells from the red-eared turtle <i>Trachemys scripta</i> . <i>Journal of Applied Physiology</i> , 2001, 90, 1679-1684.   | 1.2 | 13        |
| 95  | Water regulates oxygen binding in hagfish ( <i>Myxine glutinosa</i> ) hemoglobin. <i>Journal of Experimental Biology</i> , 2003, 206, 1389-1395.  | 0.8 | 13        |
| 96  | Decrease in the red cell cofactor 2,3-diphosphoglycerate increases hemoglobin oxygen affinity in the hibernating brown bear <i>Ursus arctos</i> . <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2013, 304, R43-R49.   | 0.9 | 13        |
| 97  | Insights into the anomalous heme pocket of rainbow trout myoglobin. <i>Journal of Inorganic Biochemistry</i> , 2012, 109, 1-8.  | 1.5 | 12        |
| 98  | Inhibitory effects of nitrite on the reactions of bovine carbonic anhydrase II with CO <sub>2</sub> and bicarbonate consistent with zinc-bound nitrite. <i>Journal of Inorganic Biochemistry</i> , 2015, 149, 6-11.   | 1.5 | 12        |
| 99  | A comparison of blood nitric oxide metabolites and hemoglobin functional properties among diving mammals. <i>Comparative Biochemistry and Physiology Part A, Molecular &amp; Integrative Physiology</i> , 2017, 205, 35-40.   | 0.8 | 12        |
| 100 | The Zebrafish Cytochrome <i>b<sub>5</sub></i> /Cytochrome <i>b<sub>5</sub></i> Reductase/NADH System Efficiently Reduces Cytochromes 1 and 2: Conserved Activity of Cytochrome <i>b<sub>5</sub></i> /Cytochrome <i>b<sub>5</sub></i> Reductases during Vertebrate Evolution. <i>Biochemistry</i> , 2019, 58, 3212-3223. | 1.2 | 12        |
| 101 | Structure and function of crocodylian hemoglobins and allosteric regulation by chloride, ATP, and CO <sub>2</sub> . <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2020, 318, R657-R667.   | 0.9 | 12        |
| 102 | Effects of an 8-weeks erythropoietin treatment on mitochondrial and whole body fat oxidation capacity during exercise in healthy males. <i>Journal of Sports Sciences</i> , 2015, 33, 570-578.  | 1.0 | 11        |
| 103 | The roles of tissue nitrate reductase activity and myoglobin in securing nitric oxide availability in deeply hypoxic crucian carp. <i>Journal of Experimental Biology</i> , 2016, 219, 3875-3883.   | 0.8 | 11        |
| 104 | Globin E is a myoglobin-related, respiratory protein highly expressed in lungfish oocytes. <i>Scientific Reports</i> , 2019, 9, 280.  | 1.6 | 11        |
| 105 | Suppression of mitochondrial respiration by hydrogen sulfide in hibernating 13-lined ground squirrels. <i>Free Radical Biology and Medicine</i> , 2021, 169, 181-186.   | 1.3 | 11        |
| 106 | New insights into survival strategies to oxygen deprivation in anoxia-tolerant vertebrates. <i>Acta Physiologica</i> , 2022, 235, e13841.   | 1.8 | 11        |
| 107 | Enhancing effects of acetazolamide on neuronal activity correlate with enhanced visual processing ability in humans. <i>Neuropharmacology</i> , 2011, 61, 900-908.  | 2.0 | 10        |
| 108 | Oxygen Binding and Aggregation of Hemoglobin from the Common European Frog, <i>Rana temporaria</i> . <i>Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology</i> , 1997, 117, 225-231.  | 0.7 | 9         |

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|-----|---|-----|-----------|
| 109 | Critical Redox and Allosteric Aspects of Nitric Oxide Interactions with Hemoglobin. <i>Antioxidants and Redox Signaling</i> , 2004, 6, 979-991.   | 2.5 | 9         |
| 110 | Molecular and functional characterization of hemocyanin of the giant African millipede, <i>Archispirostreptus gigas</i> . <i>Journal of Experimental Biology</i> , 2013, 216, 1616-23.  | 0.8 | 9         |
| 111 | Hemoglobin polymerization via disulfide bond formation in the hypoxia-tolerant turtle <i>Trachemys scripta</i> : implications for antioxidant defense and O <sub>2</sub> transport. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2018, 314, R84-R93. | 0.9 | 9         |
| 112 | Functional diversification of sea lamprey globins in evolution and development. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2018, 1866, 283-291.   | 1.1 | 9         |
| 113 | Deer mouse hemoglobin exhibits a lowered oxygen affinity owing to mobility of the E helix. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2013, 69, 393-398.  | 0.7 | 8         |
| 114 | Oxygen-Linked S-Nitrosation in Fish Myoglobins: A Cysteine-Specific Tertiary Allosteric Effect. <i>PLoS ONE</i> , 2014, 9, e97012.  | 1.1 | 8         |
| 115 | Intrinsic Mechanisms Underlying Hypoxia-Tolerant Mitochondrial Phenotype During Hypoxia-Reoxygenation Stress in a Marine Facultative Anaerobe, the Blue Mussel <i>Mytilus edulis</i> . <i>Frontiers in Marine Science</i> , 2021, 8, .  | 1.2 | 8         |
| 116 | Effects of water activity on oxygen-binding in high-molecular weight, extracellular invertebrate hemoglobin and hemocyanin. <i>Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology</i> , 2003, 136, 83-90.   | 0.7 | 7         |
| 117 | A Globin Domain in a Neuronal Transmembrane Receptor of <i>Caenorhabditis elegans</i> and <i>Ascaris suum</i> . <i>Journal of Biological Chemistry</i> , 2015, 290, 10336-10352.  | 1.6 | 7         |
| 118 | Regulation of blood oxygen transport in hibernating mammals. <i>Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology</i> , 2017, 187, 847-856.  | 0.7 | 7         |
| 119 | Emergence of a Chimeric Globin Pseudogene and Increased Hemoglobin Oxygen Affinity Underlie the Evolution of Aquatic Specializations in Sirenia. <i>Molecular Biology and Evolution</i> , 2019, 36, 1134-1147.  | 3.5 | 7         |
| 120 | Oxygenation properties of hemoglobin and the evolutionary origins of isoform multiplicity in an amphibious air-breathing fish, the blue-spotted mudskipper ( <i>Boleophthalmus pectinirostris</i> ). <i>Journal of Experimental Biology</i> , 2020, 223, .  | 0.8 | 7         |
| 121 | Tissue-dependent variations of hydrogen sulfide homeostasis in anoxic freshwater turtles. <i>Journal of Experimental Biology</i> , 2019, 222, .   | 0.8 | 6         |
| 122 | Genetic and functional diversity of the multiple lungfish myoglobins. <i>FEBS Journal</i> , 2020, 287, 1598-1611.   | 2.2 | 6         |
| 123 | Exploring pathways of NO and H <sub>2</sub> S signaling in metabolic depression: The case of anoxic turtles. <i>Comparative Biochemistry and Physiology Part A, Molecular &amp; Integrative Physiology</i> , 2021, 253, 110857.   | 0.8 | 6         |
| 124 | Carbon dioxide and bicarbonate accumulation in caiman erythrocytes during diving. <i>Journal of Experimental Biology</i> , 2021, 224, .   | 0.8 | 6         |
| 125 | Effect of NH <sub>2</sub> -terminal acetylation on the oxygenation properties of vertebrate haemoglobin. <i>Biochemical Journal</i> , 2020, 477, 3839-3850.   | 1.7 | 6         |
| 126 | Genetic variation in haemoglobin is associated with evolved changes in breathing in high-altitude deer mice. <i>Journal of Experimental Biology</i> , 2022, 225, .  | 0.8 | 6         |



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|-----|---|-----|-----------|
| 127 | Hagfish Haemoglobins. , 1998, , 321-333.  |     | 5         |
| 128 | Myoglobin-dependent O2 consumption of the hypoxic trout heart. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2013, 165, 40-45.  | 0.8 | 4         |
| 129 | New insights into the allosteric effects of CO2 and bicarbonate on crocodilian hemoglobin. Journal of Experimental Biology, 2021, 224, .  | 0.8 | 4         |
| 130 | The role of blood nitrite in the control of hypoxic vasodilation. Advances in Experimental Biology, 2007, , 199-212.  | 0.1 | 3         |
| 131 | Myoglobin oxygenation and autoxidation in three reptilian species. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2015, 187, 8-12.   | 0.8 | 3         |
| 132 | Sulfide metabolism and the mechanism of torpor. Journal of Experimental Biology, 2021, 224, .   | 0.8 | 3         |
| 133 | Kinetic properties and heme pocket structure of two domains of the polymeric hemoglobin of Artemia in comparison with the native molecule. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2015, 1854, 1307-1316.                          | 1.1 | 2         |
| 134 | Evolution of hemoglobin function in tropical air-breathing catfishes. Journal of Experimental Zoology Part A: Ecological and Integrative Physiology, 2021, 335, 814-819.  | 0.9 | 2         |
| 135 | Changes in hemoglobin function and isoform expression during embryonic development in the American alligator, Alligator mississippiensis. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2021, 321, R869-R878. | 0.9 | 2         |
| 136 | Critical Redox and Allosteric Aspects of Nitric Oxide Interactions with Hemoglobin. Antioxidants and Redox Signaling, 2004, 6, 979-991.   | 2.5 | 1         |
| 137 | Haematological studies on Aethotaxis mitopteryx DeWitt, a high-Antarctic fish with a single haemoglobin. , 1992, , 141-145.   |     | 1         |
| 138 | The primary structure and oxygen-binding properties of the single haemoglobin of the high-Antarctic fish Aethotaxis mitopteryx DeWitt. , 1992, , 135-140.   |     | 1         |
| 139 | Ontogeny of hemoglobin's oxygen binding and multiplicity in the obligate air-breathing fish Arapaima gigas. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2022, 268, 111190.                                  | 0.8 | 1         |
| 140 | Unraveling the origin of the nitrite-mediated hypoxic vasodilation. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2007, 146, S159.  | 0.8 | 0         |