Chandrasekhar Natarajan

List of Publications by Year in descending order

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36 papers

1,639 citations

331670 21 h-index 35 g-index

43 all docs 43 docs citations

43 times ranked

1640 citing authors

#	Article	IF	CITATIONS
1	Genetic variation in haemoglobin is associated with evolved changes in breathing in high-altitude deer mice. Journal of Experimental Biology, 2022, 225, .	1.7	6
2	The adaptive benefit of evolved increases in hemoglobin-O2 affinity is contingent on tissue O2 diffusing capacity in high-altitude deer mice. BMC Biology, 2021, 19, 128.	3.8	13
3	New insights into the allosteric effects of CO2 and bicarbonate on crocodilian hemoglobin. Journal of Experimental Biology, 2021, 224, .	1.7	4
4	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.	1.8	2
5	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>). Journal of Experimental Biology, 2020, 223, .	1.7	7
6	Synthesis of Recombinant Human Hemoglobin With NH ₂ â€Terminal Acetylation in <i>Escherichia coli</i> . Current Protocols in Protein Science, 2020, 101, e112.	2.8	5
7	Structure and function of crocodilian hemoglobins and allosteric regulation by chloride, ATP, and CO ₂ . American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2020, 318, R657-R667.	1.8	12
8	Ontogenesis of evolved changes in respiratory physiology in deer mice native to high altitude. Journal of Experimental Biology, 2020, 223, .	1.7	17
9	Effect of NH2-terminal acetylation on the oxygenation properties of vertebrate haemoglobin. Biochemical Journal, 2020, 477, 3839-3850.	3.7	6
10	The role of mutation bias in adaptive molecular evolution: insights from convergent changes in protein function. Philosophical Transactions of the Royal Society B: Biological Sciences, 2019, 374, 20180238.	4.0	43
11	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.	7.1	74
12	Molecular basis of hemoglobin adaptation in the high-flying bar-headed goose. PLoS Genetics, 2018, 14, e1007331.	3 . 5	58
13	Allosteric mechanisms underlying the adaptive increase in hemoglobin-oxygen affinity of the bar-headed goose. Journal of Experimental Biology, 2018, 221, .	1.7	29
14	Stability-Mediated Epistasis Restricts Accessible Mutational Pathways in the Functional Evolution of Avian Hemoglobin. Molecular Biology and Evolution, 2017, 34, 1240-1251.	8.9	49
15	Alteration of the $\hat{l}\pm 1\hat{l}^22/\hat{l}\pm 2\hat{l}^21$ subunit interface contributes to the increased hemoglobin-oxygen affinity of high-altitude deer mice. PLoS ONE, 2017, 12, e0174921.	2.5	4
16	Predictable convergence in hemoglobin function has unpredictable molecular underpinnings. Science, 2016, 354, 336-339.	12.6	206
17	Gene Turnover in the Avian Globin Gene Families and Evolutionary Changes in Hemoglobin Isoform Expression. Molecular Biology and Evolution, 2015, 32, 871-887.	8.9	40
18	Oxygenation properties and isoform diversity of snake hemoglobins. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2015, 309, R1178-R1191.	1.8	29

#	Article	IF	Citations
19	Intraspecific Polymorphism, Interspecific Divergence, and the Origins of Function-Altering Mutations in Deer Mouse Hemoglobin. Molecular Biology and Evolution, 2015, 32, 978-997.	8.9	88
20	Epistasis Constrains Mutational Pathways of Hemoglobin Adaptation in High-Altitude Pikas. Molecular Biology and Evolution, 2015, 32, 287-298.	8.9	95
21	Contribution of a mutational hot spot to hemoglobin adaptation in high-altitude Andean house wrens. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 13958-13963.	7.1	86
22	Convergent Evolution of Hemoglobin Function in High-Altitude Andean Waterfowl Involves Limited Parallelism at the Molecular Sequence Level. PLoS Genetics, 2015, 11, e1005681.	3 . 5	103
23	Integrating Evolutionary and Functional Tests of Adaptive Hypotheses: A Case Study of Altitudinal Differentiation in Hemoglobin Function in an Andean Sparrow, Zonotrichia capensis. Molecular Biology and Evolution, 2014, 31, 2948-2962.	8.9	59
24	Repeated elevational transitions in hemoglobin function during the evolution of Andean hummingbirds. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 20669-20674.	7.1	149
25	Deer mouse hemoglobin exhibits a lowered oxygen affinity owing to mobility of the E helix. Acta Crystallographica Section F: Structural Biology Communications, 2013, 69, 393-398.	0.7	8
26	Epistasis Among Adaptive Mutations in Deer Mouse Hemoglobin. Science, 2013, 340, 1324-1327.	12.6	174
27	Altitudinal Variation at Duplicated \hat{l}^2 -Globin Genes in Deer Mice: Effects of Selection, Recombination, and Gene Conversion. Genetics, 2012, 190, 203-216.	2.9	37
28	Gene Duplication and the Evolution of Hemoglobin Isoform Differentiation in Birds. Journal of Biological Chemistry, 2012, 287, 37647-37658.	3.4	54
29	Antipsychotic drug dosage and therapeutic response in schizophrenia is influenced by <i>ABCB1</i> genotypes: a study from a south Indian perspective. Pharmacogenomics, 2012, 13, 1119-1127.	1.3	30
30	Expression and Purification of Recombinant Hemoglobin in Escherichia coli. PLoS ONE, 2011, 6, e20176.	2. 5	46
31	Crystallization of <i>Chlorella</i> deoxyuridine triphosphatase. Acta Crystallographica Section F: Structural Biology Communications, 2011, 67, 1599-1602.	0.7	5
32	Evidence of association of serotonin transporter gene polymorphisms with schizophrenia in a South Indian population. Journal of Human Genetics, 2009, 54, 538-542.	2.3	33
33	Universal protocol for generating 100bp size standard for endless usage. Electronic Journal of Biotechnology, 2008, 11, 0-0.	2.2	O
34	Role of Endothelial Nitric Oxide Synthase Gene Polymorphisms in Predicting Aneurysmal Subarachnoid Hemorrhage in South Indian Patients. Disease Markers, 2008, 24, 333-339.	1.3	10
35	Association of dopamine receptor polymorphisms with schizophrenia and antipsychotic response in a South Indian population. Behavioral and Brain Functions, 2007, 3, 34.	3.3	44
36	Population dynamics of the Teak defoliator (Hyblaea puera Cramer) in Nilambur teak plantations using Randomly Amplified Gene Encoding Primers (RAGEP). BMC Ecology, 2005, 5, 1.	3.0	11