

Chandrasekhar Natarajan

List of Publications by Year in descending order

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Version: 2024-02-01

36
papers

1,639
citations

331670

21
h-index

361022

35
g-index

43
all docs

43
docs citations

43
times ranked

1640
citing authors

#	ARTICLE	IF	CITATIONS
1	Predictable convergence in hemoglobin function has unpredictable molecular underpinnings. <i>Science</i> , 2016, 354, 336-339.	12.6	206
2	Epistasis Among Adaptive Mutations in Deer Mouse Hemoglobin. <i>Science</i> , 2013, 340, 1324-1327.	12.6	174
3	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.	7.1	149
4	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.	3.5	103
5	Epistasis Constrains Mutational Pathways of Hemoglobin Adaptation in High-Altitude Pikas. <i>Molecular Biology and Evolution</i> , 2015, 32, 287-298.	8.9	95
6	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.	8.9	88
7	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.	7.1	86
8	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.	7.1	74
9	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.	8.9	59
10	Molecular basis of hemoglobin adaptation in the high-flying bar-headed goose. <i>PLoS Genetics</i> , 2018, 14, e1007331.	3.5	58
11	Gene Duplication and the Evolution of Hemoglobin Isoform Differentiation in Birds. <i>Journal of Biological Chemistry</i> , 2012, 287, 37647-37658.	3.4	54
12	Stability-Mediated Epistasis Restricts Accessible Mutational Pathways in the Functional Evolution of Avian Hemoglobin. <i>Molecular Biology and Evolution</i> , 2017, 34, 1240-1251.	8.9	49
13	Expression and Purification of Recombinant Hemoglobin in <i>Escherichia coli</i> . <i>PLoS ONE</i> , 2011, 6, e20176.	2.5	46
14	Association of dopamine receptor polymorphisms with schizophrenia and antipsychotic response in a South Indian population. <i>Behavioral and Brain Functions</i> , 2007, 3, 34.	3.3	44
15	The role of mutation bias in adaptive molecular evolution: insights from convergent changes in protein function. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2019, 374, 20180238.	4.0	43
16	Gene Turnover in the Avian Globin Gene Families and Evolutionary Changes in Hemoglobin Isoform Expression. <i>Molecular Biology and Evolution</i> , 2015, 32, 871-887.	8.9	40
17	Altitudinal Variation at Duplicated β^2 -Globin Genes in Deer Mice: Effects of Selection, Recombination, and Gene Conversion. <i>Genetics</i> , 2012, 190, 203-216.	2.9	37
18	Evidence of association of serotonin transporter gene polymorphisms with schizophrenia in a South Indian population. <i>Journal of Human Genetics</i> , 2009, 54, 538-542.	2.3	33

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19	Antipsychotic drug dosage and therapeutic response in schizophrenia is influenced by <i>ABC1</i> genotypes: a study from a south Indian perspective. <i>Pharmacogenomics</i> , 2012, 13, 1119-1127.	1.3	30
20	Oxygenation properties and isoform diversity of snake hemoglobins. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2015, 309, R1178-R1191.	1.8	29
21	Allosteric mechanisms underlying the adaptive increase in hemoglobin-oxygen affinity of the bar-headed goose. <i>Journal of Experimental Biology</i> , 2018, 221, .	1.7	29
22	Ontogenesis of evolved changes in respiratory physiology in deer mice native to high altitude. <i>Journal of Experimental Biology</i> , 2020, 223, .	1.7	17
23	The adaptive benefit of evolved increases in hemoglobin-O ₂ affinity is contingent on tissue O ₂ diffusing capacity in high-altitude deer mice. <i>BMC Biology</i> , 2021, 19, 128.	3.8	13
24	Structure and function of crocodilian hemoglobins and allosteric regulation by chloride, ATP, and CO ₂ . <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2020, 318, R657-R667.	1.8	12
25	Population dynamics of the Teak defoliator (<i>Hyblaea puera</i> Cramer) in Nilambur teak plantations using Randomly Amplified Gene Encoding Primers (RAGEP). <i>BMC Ecology</i> , 2005, 5, 1.	3.0	11
26	Role of Endothelial Nitric Oxide Synthase Gene Polymorphisms in Predicting Aneurysmal Subarachnoid Hemorrhage in South Indian Patients. <i>Disease Markers</i> , 2008, 24, 333-339.	1.3	10
27	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
28	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, .	1.7	7
29	Effect of NH ₂ -terminal acetylation on the oxygenation properties of vertebrate haemoglobin. <i>Biochemical Journal</i> , 2020, 477, 3839-3850.	3.7	6
30	Genetic variation in haemoglobin is associated with evolved changes in breathing in high-altitude deer mice. <i>Journal of Experimental Biology</i> , 2022, 225, .	1.7	6
31	Crystallization of <i>Chlorella</i> deoxyuridine triphosphatase. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2011, 67, 1599-1602.	0.7	5
32	Synthesis of Recombinant Human Hemoglobin With NH ₂ -Terminal Acetylation in <i>Escherichia coli</i> . <i>Current Protocols in Protein Science</i> , 2020, 101, e112.	2.8	5
33	Alteration of the $\alpha_1\alpha_2/\beta_1\beta_2$ subunit interface contributes to the increased hemoglobin-oxygen affinity of high-altitude deer mice. <i>PLoS ONE</i> , 2017, 12, e0174921.	2.5	4
34	New insights into the allosteric effects of CO ₂ and bicarbonate on crocodilian hemoglobin. <i>Journal of Experimental Biology</i> , 2021, 224, .	1.7	4
35	Changes in hemoglobin function and isoform expression during embryonic development in the American alligator, <i>Alligator mississippiensis</i> . <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2021, 321, R869-R878.	1.8	2
36	Universal protocol for generating 100bp size standard for endless usage. <i>Electronic Journal of Biotechnology</i> , 2008, 11, 0-0.	2.2	0