Anna Y Bogdanova

List of Publications by Year
in descending order

107 papers	3,663 citations	147801 31 h-index	149698 56 g-index
115 all docs	115 docs citations	115 times ranked	4894 citing authors

#	Article	IF	Citations
1	In Vitro Erythropoiesis at Different pO2 Induces Adaptations That Are Independent of Prior Systemic Exposure to Hypoxia. Cells, 2022, 11, 1082.	4.1	3
2	Continuous Percoll Gradient Centrifugation of Erythrocytesâ€"Explanation of Cellular Bands and Compromised Age Separation. Cells, 2022, 11, 1296.	4.1	6
3	Ionotropic glutamate receptors in platelets: opposing effects and a unifying hypothesis. Platelets, 2021, 32, 998-1008.	2.3	6
4	Lysophosphatidic Acid-Activated Calcium Signaling Is Elevated in Red Cells from Sickle Cell Disease Patients. Cells, 2021, 10, 456.	4.1	12
5	Donor Age and Red Cell Age Contribute to the Variance in Lorrca Indices in Healthy Donors for Next Generation Ektacytometry: A Pilot Study. Frontiers in Physiology, 2021, 12, 639722.	2.8	12
6	Absence of neocytolysis in humans returning from a 3â€week highâ€altitude sojourn. Acta Physiologica, 2021, 232, e13647.	3.8	26
7	Fourier Transform of Percoll Gradients Boosts CNN Classification of Hereditary Hemolytic Anemias. , 2021, , .		1
8	Of mice and men¹: How to achieve a better life with lower total Hb mass after returning from hypoxia to normoxia. (response to Song and colleagues). Acta Physiologica, 2021, 233, e13720.	3.8	3
9	Hydration of methemoglobin studied by in silico modeling and dielectric spectroscopy. Journal of Chemical Physics, 2021, 155, 015101.	3.0	4
10	Microwave Dielectric Response of Water in Solutions of Hemoglobin in Different States. , 2021, , .		1
11	â€œSo is science â€¦â€¹: No evidence for<i>neocytolysis</i>on descending the mountains (Response to Rice and Gunga). Acta Physiologica, 2021, 233, e13709.	3.8	3
12	Potential Factors for Poor Reproducibility of In Vitro Hemolysis Testing. ASAIO Journal, 2021, Publish Ahead of Print, .	1.6	1
13	Density, heterogeneity and deformability of red cells as markers of clinical severity in hereditary spherocytosis. Haematologica, 2020, 105, 338-347.	3.5	27
14	A pilot clinical phase II trial MemSID: Acute and durable changes of red blood cells of sickle cell disease patients on memantine treatment. EJHaem, 2020, 1, 23-34.	1.0	9
15	Na+ controls hypoxic signalling by the mitochondrial respiratory chain. Nature, 2020, 586, 287-291.	27.8	139
16	Early Career Scientistsâ€™ Guide to the Red Blood Cell â€“ Donâ€™t Panic!. Frontiers in Physiology, 2020, 11, 588.	2.8	8
17	MEMSID: Results From a Phase 2ÂPilot Study on Memantine Treatment for Sickle Cell Disease. HemaSphere, 2020, 4, e452.	2.7	5
18	Oxygenation state of hemoglobin defines dynamics of water molecules in its vicinity. Journal of Chemical Physics, 2020, 153, 135101.	3.0	10

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19	Heterogeneity of Red Blood Cells: Causes and Consequences. Frontiers in Physiology, 2020, 11, 392.	2.8	29
20	N-Methyl-D-Aspartate Receptors in Hematopoietic Cells: What Have We Learned?. Frontiers in Physiology, 2020, 11, 577.	2.8	10
21	Calcium Channels and Calcium-Regulated Channels in Human Red Blood Cells. Advances in Experimental Medicine and Biology, 2020, 1131, 625-648.	1.6	43
22	Attention Based Multiple Instance Learning for Classification of Blood Cell Disorders. Lecture Notes in Computer Science, 2020, , 246-256.	1.3	13
23	Gardos channelopathy: functional analysis of a novel <i>KCNN4</i> variant. Blood Advances, 2020, 4, 6336-6341.	5.2	17
24	Editorial: Red Blood Cells at the Mount of Truth: Highlights of the 22nd Meeting of the European Red Cell Research Society. Frontiers in Physiology, 2020, 11, 607456.	2.8	0
25	Influence of Equimolar Doses of Beetroot Juice and Sodium Nitrate on Time Trial Performance in Handcycling. Nutrients, 2019, 11, 1642.	4.1	11
26	Aging Markers in Equine Red Blood Cells. Frontiers in Physiology, 2019, 10, 893.	2.8	6
27	Glutaraldehyde â€“ A Subtle Tool in the Investigation of Healthy and Pathologic Red Blood Cells. Frontiers in Physiology, 2019, 10, 514.	2.8	57
28	Red Blood Cell Membrane Conductance in Hereditary Haemolytic Anaemias. Frontiers in Physiology, 2019, 10, 386.	2.8	8
29	Multiclass Deep Active Learning for Detecting Red Blood Cell Subtypes in Brightfield Microscopy. Lecture Notes in Computer Science, 2019, , 685-693.	1.3	24
30	A Previously Unrecognized Ca²⁺â€•inhibited Nonselective Cation Channel in Red Blood Cells. HemaSphere, 2018, 2, e146.	2.7	8
31	Editorial: The Red Cell Life-Cycle From Erythropoiesis to Clearance. Frontiers in Physiology, 2018, 9, 1537.	2.8	2
32	The Red Blood Cells on the Move!. Frontiers in Physiology, 2018, 9, 474.	2.8	1
33	Squeezing for Life â€“ Properties of Red Blood Cell Deformability. Frontiers in Physiology, 2018, 9, 656.	2.8	213
34	Mitochondrial complex I deactivation is related to superoxide production in acute hypoxia. Redox Biology, 2017, 12, 1040-1051.	9.0	92
35	Cysteine residues 244 and 458â€“459 within the catalytic subunit of Na,K-ATPase control the enzyme's hydrolytic and signaling function under hypoxic conditions. Redox Biology, 2017, 13, 310-319.	9.0	25
36	NMDA Receptor Activity in Circulating Red Blood Cells: Methods of Detection. Methods in Molecular Biology, 2017, 1677, 265-282.	0.9	14

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37	â€˜Gardos Channelopathyâ€™: a variant of hereditary Stomatocytosis with complex molecular regulation. Scientific Reports, 2017, 7, 1744.	3.3	68
38	Does Erythropoietin Regulate TRPC Channels in Red Blood Cells?. Cellular Physiology and Biochemistry, 2017, 41, 1219-1228.	1.6	16
39	Is Increased Intracellular Calcium in Red Blood Cells a Common Component in the Molecular Mechanism Causing Anemia?. Frontiers in Physiology, 2017, 8, 673.	2.8	47
40	Red Cell Properties after Different Modes of Blood Transportation. Frontiers in Physiology, 2016, 7, 288.	2.8	54
41	â€œOxygen Sensingâ€•by Na,K-ATPase: These Miraculous Thiols. Frontiers in Physiology, 2016, 7, 314.	2.8	70
42	Direct interaction of beta-amyloid with Na,K-ATPase as a putative regulator of the enzyme function. Scientific Reports, 2016, 6, 27738.	3.3	34
43	Cardiac N-methyl d-aspartate Receptors as a Pharmacological Target. Journal of Cardiovascular Pharmacology, 2016, 68, 356-373.	1.9	15
44	Comparing the impact of an acute exercise bout on plasma amino acid composition, intraerythrocytic Ca2+ handling, and red cell function in athletes and untrained subjects. Cell Calcium, 2016, 60, 235-244.	2.4	25
45	N-Nitrosamine-{cis-Re[CO]₂}²⁺ cobalamin conjugates as mixed CO/NO-releasing molecules. Dalton Transactions, 2016, 45, 1504-1513.	3.3	19
46	Is beetroot juice more effective than sodium nitrate? The effects of equimolar nitrate dosages of nitrate-rich beetroot juice and sodium nitrate on oxygen consumption during exercise. Applied Physiology, Nutrition and Metabolism, 2016, 41, 421-429.	1.9	51
47	Cardiac remodeling in GÎ±q and GÎ±11 knockout mice. International Journal of Cardiology, 2016, 202, 836-845.	1.7	7
48	Moderate hypothermia during<i>ex vivo</i>machine perfusion promotes recovery of hearts donated after cardiocirculatory death. European Journal of Cardio-thoracic Surgery, 2016, 49, 25-31.	1.4	27
49	Functional plasticity of the<i>N</i>-methyl-<scp>d</scp>-aspartate receptor in differentiating human erythroid precursor cells. American Journal of Physiology - Cell Physiology, 2015, 308, C993-C1007.	4.6	11
50	Washing stored red blood cells in an albumin solution improves their morphologic and hemorheologic properties. Transfusion, 2015, 55, 1872-1881.	1.6	51
51	Oxygen sensing by the Na,K-ATPase: the cellular mechanism unraveled. Free Radical Biology and Medicine, 2015, 86, S15.	2.9	0
52	Recovery of donor hearts after circulatory death with normothermic extracorporeal machine perfusionâ€. European Journal of Cardio-thoracic Surgery, 2015, 47, 173-179.	1.4	16
53	Gardos Channel Mutation Is Associated with Hereditary Dehydrate Stomatocytosis: a Complex Channelopathy. Blood, 2015, 126, 3333-3333.	1.4	2
54	Nâ€Methyl Dâ€Aspartate (NMDA) Receptors in Human Red Blood Cells in Health and Disease. FASEB Journal, 2015, 29, 845.7.	0.5	0

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55	Regulation of red cell life-span, erythropoiesis, senescence, and clearance. Frontiers in Physiology, 2014, 5, 269.	2.8	17
56	Red blood cells of sickle cell disease patients exhibit abnormally high abundance of <scp>N</scp>â€methyl Dâ€aspartate receptors mediating excessive calcium uptake. British Journal of Haematology, 2014, 167, 252-264.	2.5	35
57	Acute hypoxia produces a superoxide burst in cells. Free Radical Biology and Medicine, 2014, 71, 146-156.	2.9	106
58	Multikinase inhibitor sorafenib prevents pressure overload-induced left ventricular hypertrophy in rats by blocking the c-Raf/ERK1/2 signaling pathway. Journal of Cardiothoracic Surgery, 2014, 9, 81.	1.1	8
59	Live-Fibroblast IR Imaging of a Cytoprotective PhotoCORM Activated with Visible Light. Journal of Medicinal Chemistry, 2013, 56, 6719-6731.	6.4	70
60	Lysophosphatidic Acid Signalling in Red Blood Cells. Biophysical Journal, 2013, 104, 610a-611a.	0.5	0
61	Serotonin in the heart: the beauty and the beast. Acta Physiologica, 2013, 207, 206-207.	3.8	1
62	<i>N</i>-methyl-<scp>d</scp>-aspartate receptors in human erythroid precursor cells and in circulating red blood cells contribute to the intracellular calcium regulation. American Journal of Physiology - Cell Physiology, 2013, 305, C1123-C1138.	4.6	65
63	Red cell investigations: Art and artefacts. Blood Reviews, 2013, 27, 91-101.	5.7	74
64	Epo and Non-hematopoietic Cells: What Do We Know?. Methods in Molecular Biology, 2013, 982, 13-41.	0.9	50
65	Mechanisms tagging senescent red blood cells for clearance in healthy humans. Frontiers in Physiology, 2013, 4, 387.	2.8	162
66	Calcium in Red Blood Cellsâ€”A Perilous Balance. International Journal of Molecular Sciences, 2013, 14, 9848-9872.	4.1	204
67	Morphologically Homogeneous Red Blood Cells Present a Heterogeneous Response to Hormonal Stimulation. PLoS ONE, 2013, 8, e67697.	2.5	36
68	Cross talk between<i>S</i>-nitrosylation and<i>S</i>-glutathionylation in control of the Na,K-ATPase regulation in hypoxic heart. American Journal of Physiology - Heart and Circulatory Physiology, 2012, 303, H1332-H1343.	3.2	31
69	S-Glutathionylation of the Na,K-ATPase Catalytic Î± Subunit Is a Determinant of the Enzyme Redox Sensitivity. Journal of Biological Chemistry, 2012, 287, 32195-32205.	3.4	107
70	17 eâˆ’rhenium dicarbonyl CO-releasing molecules on a cobalamin scaffold for biological application. Dalton Transactions, 2012, 41, 370-378.	3.3	93
71	Calcium Signalling in Red Blood Cells. Biophysical Journal, 2011, 100, 518a.	0.5	0
72	Activation of N-methyl D-aspartate (NMDA) receptors has no influence on rheological properties of erythrocytes. Clinical Hemorheology and Microcirculation, 2011, 49, 307-313.	1.7	7

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73	Interventricular heterogeneity in rat heart responses to hypoxia: the tuning of glucose metabolism, ion gradients, and function. American Journal of Physiology - Heart and Circulatory Physiology, 2011, 300, H1645-H1652.	3.2	15
74	Cryohydrocytosis: increased activity of cation carriers in red cells from a patient with a band 3 mutation. Haematologica, 2010, 95, 189-198.	3.5	28
75	Oxygen-induced regulation of the intracellular glutathione levels in erythrocytes. European Journal of Applied Physiology, 2010, 109, 575-576.	2.5	0
76	Analysis of Exhaled Breath Condensate in a Mixed Population of Psittacine Birds. , 2010, 24, 185-191.		3
77	Functional NMDA receptors in rat erythrocytes. American Journal of Physiology - Cell Physiology, 2010, 298, C1315-C1325.	4.6	60
78	CO Releasing Properties and Cytoprotective Effect of <i>cis</i>-<i>trans</i>-[Re^{II}(CO)₂Br₂L₂]^{<i>n</i>} Complexes. Inorganic Chemistry, 2010, 49, 7313-7322.	4.0	118
79	First Aid Kit for Hypoxic Survival: Sensors and Strategies. Physiological and Biochemical Zoology, 2010, 83, 753-763.	1.5	30
80	Erythropoietin protects from reperfusion-induced myocardial injury by enhancing coronary endothelial nitric oxide productionâ˜†â˜†â˜†. European Journal of Cardio-thoracic Surgery, 2009, 35, 839-846.	1.4	32
81	Erythropoietin activates nitric oxide synthase in murine erythrocytes. American Journal of Physiology - Cell Physiology, 2009, 297, C378-C388.	4.6	51
82	Moderate altitude but not additional endurance training increases markers of oxidative stress in exhaled breath condensate. European Journal of Applied Physiology, 2009, 106, 599-604.	2.5	25
83	Oxygenâ€dependent ion transport in erythrocytes. Acta Physiologica, 2009, 195, 305-319.	3.8	33
84	Activation of a HIF1Î±-PPARÎ³ Axis Underlies the Integration of Glycolytic and Lipid Anabolic Pathways in Pathologic Cardiac Hypertrophy. Cell Metabolism, 2009, 9, 512-524.	16.2	342
85	Amiodarone Inhibits Arterial Thrombus Formation and Tissue Factor Translation. Arteriosclerosis, Thrombosis, and Vascular Biology, 2008, 28, 2231-2238.	2.4	21
86	Abortion in Mice with Excessive Erythrocytosis Is Due to Impaired Arteriogenesis of the Uterine Arcade1. Biology of Reproduction, 2008, 78, 1049-1057.	2.7	10
87	Oxygen-induced Regulation of Na/K ATPase in Cerebellar Granule Cells. Journal of General Physiology, 2007, 130, 389-398.	1.9	37
88	Enhanced erythro-phagocytosis in polycythemic mice overexpressing erythropoietin. Blood, 2007, 110, 762-769.	1.4	39
89	Isolated, autologous blood-perfused heart: replacement of heterotopic heart transplantation. ALTEX: Alternatives To Animal Experimentation, 2007, 24 Spec No, 75-6.	1.5	0
90	Na-K-ATPase in rat cerebellar granule cells is redox sensitive. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2006, 290, R916-R925.	1.8	69

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91	Electroporation-mediated interleukin-10 overexpression in skeletal muscle reduces acute rejection in rat cardiac allografts. Journal of Gene Medicine, 2006, 8, 242-248.	2.8	16
92	Hypoxic responses of Na+/K+ ATPase in trout hepatocytes. Journal of Experimental Biology, 2005, 208, 1793-1801.	1.7	35
93	Neuroprotection by hypoxic preconditioning: HIF-1 and erythropoietin protect from retinal degeneration. Seminars in Cell and Developmental Biology, 2005, 16, 531-538.	5.0	81
94	Pivotal Role of Reduced Glutathione in Oxygen-induced Regulation of the Na + /K + Pump in Mouse Erythrocyte Membranes. Journal of Membrane Biology, 2003, 195, 33-42.	2.1	22
95	Intracellular pH regulation in rainbow trout (Oncorhynchus mykiss) hepatocytes: the activity of sodium/proton exchange is oxygen-dependent. Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology, 2003, 173, 301-308.	1.5	9
96	Oxygen dependency of the adrenergic Na/H exchange in rainbow trout erythrocytes is diminished by a hydroxyl radical scavenger. Acta Physiologica Scandinavica, 2003, 178, 149-154.	2.2	14
97	Molecular mechanisms of oxygen-induced regulation of Na+/K+ pump. Advances in Experimental Medicine and Biology, 2003, 536, 231-8.	1.6	5
98	Copper ion redox state is critical for its effects on ion transport pathways and methaemoglobin formation in trout erythrocytes. Chemico-Biological Interactions, 2002, 139, 43-59.	4.0	22
99	Î²â€Adrenergic Stimulation of Volumeâ€Sensitive Chloride Transport in Lamprey Erythrocytes. Physiological and Biochemical Zoology, 2001, 74, 45-51.	1.5	2
100	Reactive Oxygen Species Regulate Oxygen-Sensitive Potassium Flux in Rainbow Trout Erythrocytes. Journal of General Physiology, 2001, 117, 181-190.	1.9	32
101	Copper Effects on Ion Transport across Lamprey Erythrocyte Membrane: Clâˆ'/OHâˆ' Exchange Induced by Cuprous Ions. Toxicology and Applied Pharmacology, 1999, 159, 204-213.	2.8	18
102	Intracellular pH regulation of rainbow trout and carp thrombocytes. Fish Physiology and Biochemistry, 1999, 21, 269-275.	2.3	3
103	Dehydroabietic acid, a major effluent component of paper and pulp industry, decreases erythrocyte pH in lamprey (Lampetra fluviatilis). Aquatic Toxicology, 1998, 43, 111-120.	4.0	11
104	Furosemide and DIDS penetration into Langmuir films of stearic acid. The influence of low ionic strength and pH. Colloids and Surfaces B: Biointerfaces, 1995, 5, 205-211.	5.0	3
105	Sodium transport in red blood cells of lamprey LAmpetra fluviatilis. Comparative Biochemistry and Physiology A, Comparative Physiology, 1992, 103, 763-766.	0.6	12
106	Evidence for stimulation of the K-Cl cotransport system by phenazine methosulfate. Biochemical Pharmacology, 1992, 43, 2275-2279.	4.4	10
107	Do fluorocarbons substantially increase transdermal oxygen delivery? A proof-of-principle study in mice. Open Research Europe, 0, 1, 39.	2.0	0