Anna Y Bogdanova

List of Publications by Year
in descending order

107	3,663	147801	149698
papers	citations	31 h-index	56 g-index

115	115	115	4894
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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
2	Squeezing for Life â€“ Properties of Red Blood Cell Deformability. Frontiers in Physiology, 2018, 9, 656.	2.8	213
3	Calcium in Red Blood Cellsâ€”A Perilous Balance. International Journal of Molecular Sciences, 2013, 14, 9848-9872.	4.1	204
4	Mechanisms tagging senescent red blood cells for clearance in healthy humans. Frontiers in Physiology, 2013, 4, 387.	2.8	162
5	Na+ controls hypoxic signalling by the mitochondrial respiratory chain. Nature, 2020, 586, 287-291.	27.8	139
6	CO Releasing Properties and Cytoprotective Effect of cis-trans-[Re^{II}(CO)₂Br₂L₂]ⁿ Complexes. Inorganic Chemistry, 2010, 49, 7313-7322.	4.0	118
7	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
8	Acute hypoxia produces a superoxide burst in cells. Free Radical Biology and Medicine, 2014, 71, 146-156.	2.9	106
9	17 eâ^'rhenium dicarbonyl CO-releasing molecules on a cobalamin scaffold for biological application. Dalton Transactions, 2012, 41, 370-378.	3.3	93
10	Mitochondrial complex I deactivation is related to superoxide production in acute hypoxia. Redox Biology, 2017, 12, 1040-1051.	9.0	92
11	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
12	Red cell investigations: Art and artefacts. Blood Reviews, 2013, 27, 91-101.	5.7	74
13	Live-Fibroblast IR Imaging of a Cytoprotective PhotoCORM Activated with Visible Light. Journal of Medicinal Chemistry, 2013, 56, 6719-6731.	6.4	70
14	â€œOxygen Sensingâ€•by Na,K-ATPase: These Miraculous Thiols. Frontiers in Physiology, 2016, 7, 314.	2.8	70
15	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
16	â€˜Gardos Channelopathyâ€™: a variant of hereditary Stomatocytosis with complex molecular regulation. Scientific Reports, 2017, 7, 1744.	3.3	68
17	N-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
18	Functional NMDA receptors in rat erythrocytes. American Journal of Physiology - Cell Physiology, 2010, 298, C1315-C1325.	4.6	60

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19	Glutaraldehyde â€“ A Subtle Tool in the Investigation of Healthy and Pathologic Red Blood Cells. Frontiers in Physiology, 2019, 10, 514.	2.8	57
20	Red Cell Properties after Different Modes of Blood Transportation. Frontiers in Physiology, 2016, 7, 288.	2.8	54
21	Erythropoietin activates nitric oxide synthase in murine erythrocytes. American Journal of Physiology - Cell Physiology, 2009, 297, C378-C388.	4.6	51
22	Washing stored red blood cells in an albumin solution improves their morphologic and hemorheologic properties. Transfusion, 2015, 55, 1872-1881.	1.6	51
23	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
24	Epo and Non-hematopoietic Cells: What Do We Know?. Methods in Molecular Biology, 2013, 982, 13-41.	0.9	50
25	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
26	Calcium Channels and Calcium-Regulated Channels in Human Red Blood Cells. Advances in Experimental Medicine and Biology, 2020, 1131, 625-648.	1.6	43
27	Enhanced erythro-phagocytosis in polycythemic mice overexpressing erythropoietin. Blood, 2007, 110, 762-769.	1.4	39
28	Oxygen-induced Regulation of Na/K ATPase in Cerebellar Granule Cells. Journal of General Physiology, 2007, 130, 389-398.	1.9	37
29	Morphologically Homogeneous Red Blood Cells Present a Heterogeneous Response to Hormonal Stimulation. PLoS ONE, 2013, 8, e67697.	2.5	36
30	Hypoxic responses of Na+/K+ ATPase in trout hepatocytes. Journal of Experimental Biology, 2005, 208, 1793-1801.	1.7	35
31	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
32	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
33	Oxygenâ€dependent ion transport in erythrocytes. Acta Physiologica, 2009, 195, 305-319.	3.8	33
34	Reactive Oxygen Species Regulate Oxygen-Sensitive Potassium Flux in Rainbow Trout Erythrocytes. Journal of General Physiology, 2001, 117, 181-190.	1.9	32
35	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
36	Cross talk betweenS-nitrosylation andS-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

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37	First Aid Kit for Hypoxic Survival: Sensors and Strategies. Physiological and Biochemical Zoology, 2010, 83, 753-763.	1.5	30
38	Heterogeneity of Red Blood Cells: Causes and Consequences. Frontiers in Physiology, 2020, 11, 392.	2.8	29
39	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
40	Moderate hypothermia duringex vivomachine perfusion promotes recovery of hearts donated after cardiocirculatory death. European Journal of Cardio-thoracic Surgery, 2016, 49, 25-31.	1.4	27
41	Density, heterogeneity and deformability of red cells as markers of clinical severity in hereditary spherocytosis. Haematologica, 2020, 105, 338-347.	3.5	27
42	Absence of neocytolysis in humans returning from a 3â€week highâ€altitude sojourn. Acta Physiologica, 2021, 232, e13647.	3.8	26
43	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
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	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
46	Multiclass Deep Active Learning for Detecting Red Blood Cell Subtypes in Brightfield Microscopy. Lecture Notes in Computer Science, 2019, , 685-693.	1.3	24
47	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
48	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
49	Amiodarone Inhibits Arterial Thrombus Formation and Tissue Factor Translation. Arteriosclerosis, Thrombosis, and Vascular Biology, 2008, 28, 2231-2238.	2.4	21
50	N-Nitrosamine-{cis-Re[CO]₂}²⁺ cobalamin conjugates as mixed CO/NO-releasing molecules. Dalton Transactions, 2016, 45, 1504-1513.	3.3	19
51	Copper Effects on Ion Transport across Lamprey Erythrocyte Membrane: Clâ^'/OHâ^' Exchange Induced by Cuprous Ions. Toxicology and Applied Pharmacology, 1999, 159, 204-213.	2.8	18
52	Regulation of red cell life-span, erythropoiesis, senescence, and clearance. Frontiers in Physiology, 2014, 5, 269.	2.8	17
53	Gardos channelopathy: functional analysis of a novel KCNN4 variant. Blood Advances, 2020, 4, 6336-6341.	5.2	17
54	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

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55	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
56	Does Erythropoietin Regulate TRPC Channels in Red Blood Cells?. Cellular Physiology and Biochemistry, 2017, 41, 1219-1228.	1.6	16
57	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
58	Cardiac N-methyl d-aspartate Receptors as a Pharmacological Target. Journal of Cardiovascular Pharmacology, 2016, 68, 356-373.	1.9	15
59	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
60	NMDA Receptor Activity in Circulating Red Blood Cells: Methods of Detection. Methods in Molecular Biology, 2017, 1677, 265-282.	0.9	14
61	Attention Based Multiple Instance Learning for Classification of Blood Cell Disorders. Lecture Notes in Computer Science, 2020, , 246-256.	1.3	13
62	Sodium transport in red blood cells of lamprey LAmpetra fluviatilis. Comparative Biochemistry and Physiology A, Comparative Physiology, 1992, 103, 763-766.	0.6	12
63	Lysophosphatidic Acid-Activated Calcium Signaling Is Elevated in Red Cells from Sickle Cell Disease Patients. Cells, 2021, 10, 456.	4.1	12
64	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
65	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
66	Functional plasticity of theN-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
67	Influence of Equimolar Doses of Beetroot Juice and Sodium Nitrate on Time Trial Performance in Handcycling. Nutrients, 2019, 11, 1642.	4.1	11
68	Evidence for stimulation of the K-Cl cotransport system by phenazine methosulfate. Biochemical Pharmacology, 1992, 43, 2275-2279.	4.4	10
69	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
70	Oxygenation state of hemoglobin defines dynamics of water molecules in its vicinity. Journal of Chemical Physics, 2020, 153, 135101.	3.0	10
71	N-Methyl-D-Aspartate Receptors in Hematopoietic Cells: What Have We Learned?. Frontiers in Physiology, 2020, 11, 577.	2.8	10
72	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

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73	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
74	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
75	A Previously Unrecognized Ca²⁺â€inhibited Nonselective Cation Channel in Red Blood Cells. HemaSphere, 2018, 2, e146.	2.7	8
76	Red Blood Cell Membrane Conductance in Hereditary Haemolytic Anaemias. Frontiers in Physiology, 2019, 10, 386.	2.8	8
77	Early Career Scientistsâ€™ Guide to the Red Blood Cell â€“ Donâ€™t Panic!. Frontiers in Physiology, 2020, 11, 588.	2.8	8
78	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
79	Cardiac remodeling in GÎ±q and GÎ±11 knockout mice. International Journal of Cardiology, 2016, 202, 836-845.	1.7	7
80	Aging Markers in Equine Red Blood Cells. Frontiers in Physiology, 2019, 10, 893.	2.8	6
81	Ionotropic glutamate receptors in platelets: opposing effects and a unifying hypothesis. Platelets, 2021, 32, 998-1008.	2.3	6
82	Continuous Percoll Gradient Centrifugation of Erythrocytesâ€”Explanation of Cellular Bands and Compromised Age Separation. Cells, 2022, 11, 1296.	4.1	6
83	MEMSID: Results From a Phase 2ÂPilot Study on Memantine Treatment for Sickle Cell Disease. HemaSphere, 2020, 4, e452.	2.7	5
84	Molecular mechanisms of oxygen-induced regulation of Na+/K+ pump. Advances in Experimental Medicine and Biology, 2003, 536, 231-8.	1.6	5
85	Hydration of methemoglobin studied by in silico modeling and dielectric spectroscopy. Journal of Chemical Physics, 2021, 155, 015101.	3.0	4
86	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
87	Intracellular pH regulation of rainbow trout and carp thrombocytes. Fish Physiology and Biochemistry, 1999, 21, 269-275.	2.3	3
88	Analysis of Exhaled Breath Condensate in a Mixed Population of Psittacine Birds. , 2010, 24, 185-191.		3
89	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
90	â€œSo is science â€¦â€¹: No evidence forneocytolysison descending the mountains (Response to Rice and Gunga). Acta Physiologica, 2021, 233, e13709.	3.8	3

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91	In Vitro Erythropoiesis at Different pO2 Induces Adaptations That Are Independent of Prior Systemic Exposure to Hypoxia. Cells, 2022, 11, 1082.	4.1	3
92	Î²â€Adrenergic Stimulation of Volumeâ€Sensitive Chloride Transport in Lamprey Erythrocytes. Physiological and Biochemical Zoology, 2001, 74, 45-51.	1.5	2
93	Editorial: The Red Cell Life-Cycle From Erythropoiesis to Clearance. Frontiers in Physiology, 2018, 9, 1537.	2.8	2
94	Gardos Channel Mutation Is Associated with Hereditary Dehydrate Stomatocytosis: a Complex Channelopathy. Blood, 2015, 126, 3333-3333.	1.4	2
95	Serotonin in the heart: the beauty and the beast. Acta Physiologica, 2013, 207, 206-207.	3.8	1
96	The Red Blood Cells on the Move!. Frontiers in Physiology, 2018, 9, 474.	2.8	1
97	Fourier Transform of Percoll Gradients Boosts CNN Classification of Hereditary Hemolytic Anemias. , 2021, , .		1
98	Microwave Dielectric Response of Water in Solutions of Hemoglobin in Different States. , 2021, , .		1
99	Potential Factors for Poor Reproducibility of In Vitro Hemolysis Testing. ASAIO Journal, 2021, Publish Ahead of Print, .	1.6	1
100	Oxygen-induced regulation of the intracellular glutathione levels in erythrocytes. European Journal of Applied Physiology, 2010, 109, 575-576.	2.5	0
101	Calcium Signalling in Red Blood Cells. Biophysical Journal, 2011, 100, 518a.	0.5	0
102	Lysophosphatidic Acid Signalling in Red Blood Cells. Biophysical Journal, 2013, 104, 610a-611a.	0.5	0
103	Oxygen sensing by the Na,K-ATPase: the cellular mechanism unraveled. Free Radical Biology and Medicine, 2015, 86, S15.	2.9	0
104	Do fluorocarbons substantially increase transdermal oxygen delivery? A proof-of-principle study in mice. Open Research Europe, 0, 1, 39.	2.0	0
105	Nâ€Methyl Dâ€Aspartate (NMDA) Receptors in Human Red Blood Cells in Health and Disease. FASEB Journal, 2015, 29, 845.7.	0.5	0
106	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
107	Isolated, autologous blood-perfused heart: replacement of heterotopic heart transplantation. ALTEX: Alternatives To Animal Experimentation, 2007, 24 Spec No, 75-6.	1.5	0