David F Wilson

List of Publications by Year
in descending order

265 papers	10,988 citations	22153 59 h-index	39675 94 g-index
267 all docs	267 docs citations	267 times ranked	5142 citing authors

#	Article	IF	Citations
1	Regulation of cellular energy metabolism. Journal of Membrane Biology, 1982, 70, 1-14.	2.1	401
2	The oxygen dependence of cellular energy metabolism. Archives of Biochemistry and Biophysics, 1979, 195, 485-493.	3.0	351
3	Oxyphor R2 and G2: phosphors for measuring oxygen by oxygen-dependent quenching of phosphorescence. Analytical Biochemistry, 2002, 310, 191-198.	2.4	269
4	Redox potentiometry in mitochondrial and photosynthetic bionergetics. Biochimica Et Biophysica Acta - Reviews on Bioenergetics, 1974, 346, 165-212.	0.2	240
5	Calibration of Oxygen-Dependent Quenching of the Phosphorescence of Pd-meso-tetra (4-Carboxyphenyl) Porphine: A Phosphor with General Application for Measuring Oxygen Concentration in Biological Systems. Analytical Biochemistry, 1996, 236, 153-160.	2.4	228
6	Energy dependent changes in the oxidation-reduction potential of cytochrome b. Biochemical and Biophysical Research Communications, 1970, 39, 59-64.	2.1	223
7	Equilibrium relations between the oxidationâ€"reduction reactions and the adenosine triphosphate synthesis in suspensions of isolated liver cells. Biochemical Journal, 1974, 140, 57-64.	3.7	215
8	Two New â€œProtectedâ€•Oxyphors for Biological Oximetry: Properties and Application in Tumor Imaging. Analytical Chemistry, 2011, 83, 8756-8765.	6.5	201
9	Dendritic Phosphorescent Probes for Oxygen Imaging in Biological Systems. ACS Applied Materials & Interfaces, 2009, 1, 1292-1304.	8.0	194
10	The Central Role of Glucokinase in Glucose Homeostasis: A Perspective 50 Years After Demonstrating the Presence of the Enzyme in Islets of Langerhans. Frontiers in Physiology, 2019, 10, 148.	2.8	179
11	Heme-heme interaction in cytochrome oxidase. Biochimica Et Biophysica Acta - Bioenergetics, 1972, 256, 277-286.	1.0	177
12	Oxidative phosphorylation: regulation and role in cellular and tissue metabolism. Journal of Physiology, 2017, 595, 7023-7038.	2.9	175
13	Quantitative dependence of mitochondrial oxidative phosphorylation on oxygen concentration: A mathematical model. Archives of Biochemistry and Biophysics, 1979, 195, 494-504.	3.0	167
14	The Pervasive Presence of Fluctuating Oxygenation in Tumors. Cancer Research, 2008, 68, 5812-5819.	0.9	163
15	The oxidation-reduction potentials of cytochromes a and a3 in intact rat liver mitochondria. Archives of Biochemistry and Biophysics, 1970, 136, 583-585.	3.0	160
16	Control of mitochondrial respiration: A quantitative evaluation of the roles of cytochrome c and oxygen. Archives of Biochemistry and Biophysics, 1977, 182, 749-762.	3.0	157
17	Neurotransmitter amino acids in the CNS. I. Regional changes in amino acid levels in rat brain during ischemia and reperfusion. Brain Research, 1984, 304, 9-22.	2.2	140
18	Thermodynamic relationships between the oxidation-reduction reactions and the ATP synthesis in suspensions of isolated pigeon heart mitochondria. Archives of Biochemistry and Biophysics, 1974, 160, 412-421.	3.0	129

#	Article	IF	Citations
19	Regulation of cellular metabolism by intracellular phosphate. Biochimica Et Biophysica Acta - Bioenergetics, 1977, 462, 20-35.	1.0	127
20	Control of respiration in isolated mitochondria: Quantitative evaluation of the dependence of respiratory rates on [ATP], [ADP], and [Pi]. Archives of Biochemistry and Biophysics, 1977, 181, 164-171.	3.0	126
21	Dendritic Polyglutamic Porphyrins: Probing Porphyrin Protection by Oxygen-Dependent Quenching of Phosphorescence. Chemistry - A European Journal, 1999, 5, 1338-1347.	3.3	124
22	The primary oxygen sensor of the cat carotid body is cytochromea3of the mitochondrial respiratory chain. FEBS Letters, 1994, 351, 370-374.	2.8	115
23	Metallotetrabenzoporphyrins. New phosphorescent probes for oxygen measurements. Journal of the Chemical Society Perkin Transactions II, 1995, , 103.	0.9	113
24	Frequency domain instrument for measuring phosphorescence lifetime distributions in heterogeneous samples. Review of Scientific Instruments, 2001, 72, 3396-3406.	1.3	111
25	Thermodynamic relations between the mitochondrial oxidation-reduction reactions and cellular ATP levels in ascites tumor cells and perfused rat liver. Biochemistry, 1974, 13, 5305-5311.	2.5	110
26	Oxygen pressures in the interstitial space and their relationship to those in the blood plasma in resting skeletal muscle. Journal of Applied Physiology, 2006, 101, 1648-1656.	2.5	106
27	Hemeâ€"Heme interaction in cytochrome c oxidase in situ as measured by EPR spectroscopy. Archives of Biochemistry and Biophysics, 1972, 150, 154-163.	3.0	102
28	Control of respiration by the mitochondrial phosphorylation state. Archives of Biochemistry and Biophysics, 1974, 161, 581-591.	3.0	102
29	Oxygen distribution in the retinal and choroidal vessels of the cat as measured by a new phosphorescence imaging method. Applied Optics, 1992, 31, 3711.	2.1	102
30	Studies on Cytochrome c Peroxidase. Journal of Biological Chemistry, 1966, 241, 5347-5352.	3.4	94
31	Mechanism of action of uncouplers of oxidative phosphorylation. Biochemistry, 1971, 10, 2897-2902.	2.5	92
32	The spectral properties of the b cytochromes in intact mitochondria. Biochimica Et Biophysica Acta - Bioenergetics, 1971, 253, 88-97.	1.0	90
33	Oxygen distribution in murine tumors: characterization using oxygen-dependent quenching of phosphorescence. Journal of Applied Physiology, 2005, 98, 1503-1510.	2.5	90
34	Neurotransmitter Metabolism in Rat Brain Synaptosomes: Effect of Anoxia and pH. Journal of Neurochemistry, 1982, 38, 1657-1667.	3.9	88
35	Hemeâ€"Heme interaction in cytochrome c oxidase: The cooperativity of the hemes of cytochrome c oxidase as evidenced in the reaction with CO. Archives of Biochemistry and Biophysics, 1974, 160, 476-486.	3.0	86
36	Phosphorescent Pd Porphyrinâ˜Dendrimers:Â Tuning Core Accessibility by Varying the Hydrophobicity of the Dendritic Matrix. Macromolecules, 2002, 35, 1991-1993.	4.8	85

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37	Cytochrome c oxidase: A synopsis. Archives of Biochemistry and Biophysics, 1978, 188, 1-14.	3.0	83
38	Relationship of transmembrane pH and electrical gradients with respiration and adenosine 5'-triphosphate synthesis in mitochondria. Biochemistry, 1980, 19, 4213-4221.	2.5	81
39	Glucokinase activation repairs defective bioenergetics of islets of Langerhans isolated from type 2 diabetics. American Journal of Physiology - Endocrinology and Metabolism, 2012, 302, E87-E102.	3.5	81
40	Monitoring of the Oxygen Pressure in the Blood of Live Animals Using the Oxygen Dependent Quenching of Phosphorescence. Advances in Experimental Medicine and Biology, 1992, 316, 179-185.	1.6	80
41	Studies on iron-sulfur proteins in the site I region of the respiratory chain in pigeon heart mitochondria and submitochondrial particles. Biochemical and Biophysical Research Communications, 1972, 46, 1631-1638.	2.1	79
42	Effects of Kainic Acid in Rat Brain Synaptosomes: The Involvement of Calcium. Journal of Neurochemistry, 1984, 43, 747-754.	3.9	78
43	Effects of uncouplers of oxidative phosphorylation on the specific conductance of bimolecular lipid membranes. Archives of Biochemistry and Biophysics, 1970, 141, 141-146.	3.0	77
44	The properties of the mitochondrial succinate-cytochrome c reductase. Archives of Biochemistry and Biophysics, 1972, 151, 112-121.	3.0	77
45	Metoprolol Reduces Cerebral Tissue Oxygen Tension after Acute Hemodilution in Rats. Anesthesiology, 2009, 111, 988-1000.	2.5	76
46	Regulation of cellular energy metabolism. The Crabtree effect. Biochimica Et Biophysica Acta - Bioenergetics, 1980, 591, 209-223.	1.0	74
47	Measurement of Muscle Microvascular Oxygen Pressures: Compartmentalization of Phosphorescent Probe. Microcirculation, 2004, 11, 317-326.	1.8	73
48	Some properties of the redox components of cytochrome c oxidase and their interactions. Archives of Biochemistry and Biophysics, 1976, 175, 160-172.	3.0	72
49	A New Method for Measuring Oxygen Concentration in Biological Systems. Advances in Experimental Medicine and Biology, 1986, 200, 189-193.	1.6	72
50	Mitochondrial electron transport and energy conservation. Accounts of Chemical Research, 1972, 5, 234-241.	15.6	66
51	Energy Metabolism in Rat Brain Synaptosomes from Nembutal-Anesthetized and Nonanesthetized Animals. Journal of Neurochemistry, 1980, 34, 1380-1386.	3.9	65
52	A Role for Transglutaminase in Neurotransmitter Release by Rat Brain Synaptosomes. Journal of Neurochemistry, 1986, 46, 499-508.	3.9	65
53	Lipid Hydroperoxides Inhibit Reacylation of Phospholipids in Neuronal Membranes. Journal of Neurochemistry, 1989, 52, 255-260.	3.9	65
54	Priming of hypoxia-inducible factor by neuronal nitric oxide synthase is essential for adaptive responses to severe anemia. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 17544-17549.	7.1	65

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55	Cytochrome c interactions with membranes. Archives of Biochemistry and Biophysics, 1975, 171, 108-116.	3.0	64
56	Neurotransmitter amino acids in the CNS. II. Some changes in amino acid levels in rat brain synaptosomes during and after in vitro anoxia and simulated ischemia. Brain Research, 1984, 304, 23-35.	2.2	64
57	Tomographic imaging of oxygen by phosphorescence lifetime. Applied Optics, 2006, 45, 8547.	2.1	64
58	Mitochondrial transmembrane pH and electrical gradients: evaluation of their energy relationships with respiratory rate and ATP synthesis. Biochemistry, 1982, 21, 1438-1444.	2.5	63
59	Effects of Graded Levels of Tissue Oxygen Pressure on Dopamine Metabolism in the Striatum of Newborn Piglets. Journal of Neurochemistry, 1993, 60, 161-166.	3.9	61
60	Ammonia-Induced Release of Neurotransmitters from Rat Brain Synaptosomes: Differences Between the Effects on Amines and Amino Acids. Journal of Neurochemistry, 1987, 49, 1258-1265.	3.9	59
61	The oxidation-reduction potentials of the iron-sulfur proteins in mitochondria. Biochemical and Biophysical Research Communications, 1970, 41, 1273-1278.	2.1	57
62	Interaction of uncouplers with the mitochondrial membrane: Identification of the high affinity binding site. Archives of Biochemistry and Biophysics, 1978, 191, 647-656.	3.0	57
63	A New, Water Soluble, Phosphor for Oxygen Measurements in Vivo. Advances in Experimental Medicine and Biology, 1997, 428, 651-656.	1.6	57
64	Ethanol metabolism: The good, the bad, and the ugly. Medical Hypotheses, 2020, 140, 109638.	1.5	57
65	Energy conservation in detergent-treated mitochondria and purified succinate-cytochrome c reductase. Biochemical and Biophysical Research Communications, 1971, 44, 759-766.	2.1	56
66	Orientation of the hemes of cytochrome c oxidase and cytochrome c in mitochondria. FEBS Letters, 1977, 76, 235-239.	2.8	56
67	Apparent adenosine triphosphate induced ligand change in cytochrome a3 of pigeon heart mitochondria. Biochemistry, 1972, 11, 4613-4621.	2.5	55
68	Homeostatic regulation of cellular energy metabolism. Trends in Biochemical Sciences, 1978, 3, 219-223.	7.5	53
69	Control of mitochondrial respiration by the phosphate potential. Biochemical and Biophysical Research Communications, 1973, 53, 326-333.	2.1	52
70	Electrostatic Core Shielding in Dendritic Polyglutamic Porphyrins. Chemistry - A European Journal, 2000, 6, 2456-2461.	3.3	50
71	Quantifying the role of oxygen pressure in tissue function. American Journal of Physiology - Heart and Circulatory Physiology, 2008, 294, H11-H13.	3.2	50
72	The chemical properties of cytochrome c oxidase in intact mitochondria. Archives of Biochemistry and Biophysics, 1972, 151, 180-187.	3.0	49

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73	The energy dependence of the chemical properties of cytochrome c oxidase. Archives of Biochemistry and Biophysics, 1972, 151, 188-193.	3.0	49
74	The oxidation-reduction potentials of the hemes and copper of cytochrome oxidase from beef heart. Archives of Biochemistry and Biophysics, 1971, 145, 149-154.	3.0	48
75	Inhibitors of cytochrome c oxidase. , 1980, 8, 1-20.		48
76	Oxygen dependence of cellular metabolism: The effect of O2 tension on gluconeogenesis and urea synthesis in isolated rat hepatocytes. Journal of Cellular Physiology, 1984, 120, 13-18.	4.1	48
77	Relationship of extracellular dopamine in striatum of newborn piglets to cortical oxygen pressure. Neurochemical Research, 1994, 19, 649-655.	3.3	48
78	Comparison of Postasphyxial Resuscitation with 100% and 21% Oxygen on Cortical Oxygen Pressure and Striatal Dopamine Metabolism in Newborn Piglets. Journal of Neurochemistry, 1995, 64, 292-298.	3.9	48
79	Oxygen, pH, and mitochondrial oxidative phosphorylation. Journal of Applied Physiology, 2012, 113, 1838-1845.	2.5	48
80	Recursive Maximum Entropy Algorithm and its Application to the Luminescence Lifetime Distribution Recovery. Applied Spectroscopy, 2000, 54, 849-855.	2.2	46
81	Oxygen distribution and vascular injury in the mouse eye measured by phosphorescence-lifetime imaging. Applied Optics, 2005, 44, 5239.	2.1	46
82	Two b cytochromes of pigeon heart mitochondria. FEBS Letters, 1971, 15, 209-212.	2.8	44
83	The role of glial cells in regulation of neurotransmitter amino acids in the external environment. II. Mechanism of aspartate transport. Brain Research, 1986, 369, 203-214.	2.2	44
84	Effect of Oxygen Concentration on Cellular Metabolism. Chest, 1985, 88, 229S-232S.	0.8	43
85	Phosphorimeters for analysis of decay profiles and real time monitoring of exponential decay and oxygen concentrations. Analytical Biochemistry, 1988, 174, 73-79.	2.4	42
86	Energy dependent changes in the cytochromes of the mitochondrial respiratory chain. Archives of Biochemistry and Biophysics, 1973, 158, 200-212.	3.0	41
87	Interaction of uncouplers with the mitochondrial membrane: A high-affinity binding site. Archives of Biochemistry and Biophysics, 1977, 184, 578-585.	3.0	40
88	The Effect of Acute Hypoxia on Synaptosomes from Rat Brain. Journal of Neurochemistry, 1980, 34, 1160-1165.	3.9	40
89	A method for measuring oxygen distributions in tissue using frequency domain phosphorometry. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2002, 132, 147-152.	1.8	39
90	Energy-dependent effects on the oxidation-reduction midpoint potentials of the b and c cytochromes in phosphorylating submitochondrial particles from pigeon heart. Biochemistry, 1972, 11, 1937-1943.	2.5	38

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91	Effects of In Vitro Hypoxia and Lowered pH on Potassium Fluxes and Energy Metabolism in Rat Brain Synaptosomes. Journal of Neurochemistry, 1981, 36, 116-123.	3.9	38
92	Thermodynamic relationships among cytochrome bK, cytochrome bT, and ubiquinone in mitochondria. Archives of Biochemistry and Biophysics, 1975, 167, 116-128.	3.0	37
93	Transport of Cysteate by Synaptosomes Isolated from Rat Brain: Evidence that It Utilizes the Same Transporter as Aspartate, Glutamate, and Cysteine Sulfinate. Journal of Neurochemistry, 1986, 47, 1091-1097.	3.9	37
94	Evaluation of phototoxicity of dendritic porphyrin-based phosphorescent oxygen probes: an in vitro study. Photochemical and Photobiological Sciences, 2011, 10, 1056-1065.	2.9	37
95	Tissue oxygen tension during regional low-flow perfusion in neonates. Journal of Thoracic and Cardiovascular Surgery, 2003, 125, 472-480.	0.8	36
96	Reaction of CO with cytochrome c oxidase. Titration of the reaction site with chemical oxidant and reductant. Biochimica Et Biophysica Acta - Bioenergetics, 1977, 461, 218-230.	1.0	34
97	Mitochondrial cytochrome b-c1 complex: Its oxidation-reduction components and their stoichiometry. Archives of Biochemistry and Biophysics, 1976, 177, 133-143.	3.0	33
98	A specific uncoupler-binding protein in Tetrahymena pyriformis and Paracoccus denitrificans. Biochimica Et Biophysica Acta - Bioenergetics, 1980, 593, 224-229.	1.0	33
99	An aryl azide suitable for photoaffinity labeling of amine groups in proteins. Archives of Biochemistry and Biophysics, 1975, 171, 104-107.	3.0	32
100	Measurements of the Effective Diffusion Coefficient of Oxygen in Pancreatic Islets. Industrial & Engineering Chemistry Research, 2007, 46, 6157-6163.	3.7	32
101	Regulation of cellular metabolism: programming and maintaining metabolic homeostasis. Journal of Applied Physiology, 2013, 115, 1583-1588.	2.5	32
102	Mitochondrial cytochromecoxidase: mechanism of action and role in regulating oxidative phosphorylation. Journal of Applied Physiology, 2014, 117, 1431-1439.	2.5	30
103	Binding of the intramitochondrial ADP and its relationship to adenine nucleotide translocation. FEBS Letters, 1982, 143, 228-232.	2.8	29
104	Relationships of Dopamine, Cortical Oxygen Pressure, and Hydroxyl Radicals in Brain of Newborn Piglets During Hypoxia and Posthypoxic Recovery. Journal of Neurochemistry, 2002, 65, 1205-1212.	3.9	29
105	Immediate and Long-Term Responses of the Carotid Body to High Altitude. High Altitude Medicine and Biology, 2005, 6, 97-111.	0.9	29
106	The low-temperature spectral properties of mammalian cytochrome oxidase. I. The enzyme in intact rat-liver mitochondria. Biochimica Et Biophysica Acta - Bioenergetics, 1967, 143, 52-61.	1.0	28
107	Regulation of respiration in Paracoccus denitrificans: The dependence on redox state of cytochrome c and [ATP]/[ADP][Pi]. Archives of Biochemistry and Biophysics, 1979, 197, 463-469.	3.0	28
108	High affinity proline uptake in rat brain synaptosomes. FEBS Letters, 1983, 161, 301-305.	2.8	28

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109	Metoprolol impairs resistance artery function in mice. Journal of Applied Physiology, 2011, 111, 1125-1133.	2.5	28
110	Quantitative assessment of brain microvascular and tissue oxygenation during cardiac arrest and resuscitation in pigs. Anaesthesia, 2013, 68, 723-735.	3.8	28
111	Treatment with a Highly Selective Î²1 Antagonist Causes Dose-Dependent Impairment of Cerebral Perfusion After Hemodilution in Rats. Anesthesia and Analgesia, 2013, 116, 649-662.	2.2	28
112	Programming and regulation of metabolic homeostasis. American Journal of Physiology - Endocrinology and Metabolism, 2015, 308, E506-E517.	3.5	28
113	An energy-dependent transformation of a ferricytochrome of the mitochondrial respiratory chain. FEBS Letters, 1972, 20, 61-65.	2.8	27
114	Steric and electronic effects on the uncoupling activity of substituted 3,5 dichlorosalicylanilides. FEBS Letters, 1975, 49, 338-341.	2.8	27
115	Measurement of transmembrane pH gradients in human erythrocytes using 19F NMR. Analytical Biochemistry, 1981, 114, 415-418.	2.4	27
116	Cholinergic regulation of fuel-induced hormone secretion and respiration of SUR1â^'/â^' mouse islets. American Journal of Physiology - Endocrinology and Metabolism, 2006, 291, E525-E535.	3.5	27
117	Factors Modulating the Oxygen Dependence of Mitochondrial Oxidative Phosphorylation. Advances in Experimental Medicine and Biology, 1988, 222, 121-131.	1.6	27
118	Energy metabolism in muscle and its regulation during individual contraction-relaxation cycles. Trends in Biochemical Sciences, 1981, 6, 16-19.	7.5	26
119	Adenine nucleotide efflux in mitochondria induced by inorganic pyrophosphate. Biochimica Et Biophysica Acta - Bioenergetics, 1982, 680, 28-32.	1.0	26
120	Oxidative phosphorylation: unique regulatory mechanism and role in metabolic homeostasis. Journal of Applied Physiology, 2017, 122, 611-619.	2.5	26
121	Energy-Transducing Components in Mitochondrial Respiration1 1Supported by National Science Foundation grant GB-28125 and National Institute of Health grant GM-12202. DFW is the recipient of U.S. Public Health Service Career Development Award 1-KO4-GM 18154.. Current Topics in Bioenergetics, 1973, 5, 233-265.	2.7	26
122	Mitochondrial cytochromecoxidase and control of energy metabolism: measurements in suspensions of isolated mitochondria. Journal of Applied Physiology, 2014, 117, 1424-1430.	2.5	25
123	Energy dependence of the half-reduction potential of iron-sulfur center 1 in the site I region of the respiratory chain in pigeon heart mitochondria. Biochemical and Biophysical Research Communications, 1972, 49, 1087-1092.	2.1	24
124	Heme-heme interactions in cytochrome c oxidase; Effects of photodissociation of the CO compound. Biochemical and Biophysical Research Communications, 1972, 48, 1266-1272.	2.1	24
125	Measurement of tumor oxygenation using new frequency domain phosphorometers. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2002, 132, 153-159.	1.8	24
126	Energy dependence of oxidation-reduction potentials of the b and c cytochromes in beef heart submitochondrial particles. Biochemical and Biophysical Research Communications, 1971, 43, 1186-1191.	2.1	23

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127	Studies on the orientations of the mitochondrial redox carriers. Archives of Biochemistry and Biophysics, 1979, 192, 80-85.	3.0	23
128	Effect of hemorrhagic hypotension on extracellular level of dopamine, cortical oxygen pressure and blood flow in brain of newborn piglets. Neuroscience Letters, 1994, 180, 247-252.	2.1	22
129	Comparison of low-flow cardiopulmonary bypass and circulatory arrest on brain oxygen and metabolism. Annals of Thoracic Surgery, 2004, 77, 2138-2143.	1.3	22
130	Oxygen Distributions in Tissue Measured by Phosphorescence Quenching. Advances in Experimental Medicine and Biology, 2003, 510, 181-185.	1.6	22
131	Palmitic acid acutely inhibits acetylcholine- but not GLP-1-stimulated insulin secretion in mouse pancreatic islets. American Journal of Physiology - Endocrinology and Metabolism, 2010, 299, E475-E485.	3.5	21
132	The oxidation-reduction potentials of iron-sulfur centers in the site I region of the respiratory chain inC. utilissubmitochondrial particles. FEBS Letters, 1972, 21, 59-62.	2.8	20
133	The oxidation-reduction potentials and rates of oxidation of the cytochromes of Nitrobacter agilis. Archives of Biochemistry and Biophysics, 1972, 153, 312-319.	3.0	20
134	Intravascular oxygen distribution in subcutaneous 9L tumors and radiation sensitivity. Journal of Applied Physiology, 1997, 82, 1939-1945.	2.5	20
135	Response of Brain Oxygenation and Metabolism to Deep Hypothermic Circulatory Arrest in Newborn Piglets: Comparison of pH-Stat and Alpha-Stat Strategies. Annals of Thoracic Surgery, 2007, 84, 170-176.	1.3	20
136	Metabolic Homeostasis in Life as We Know It: Its Origin and Thermodynamic Basis. Frontiers in Physiology, 2021, 12, 658997.	2.8	20
137	Extended Porphyrins. Advances in Experimental Medicine and Biology, 1997, , 597-603.	1.6	19
138	HEME-HEME INTERACTION BETWEEN THE CYTOCHROMES OF THE MITOCHONDRIAL RESPIRATORY CHAIN*. Annals of the New York Academy of Sciences, 1974, 227, 630-635.	3.8	18
139	[21] Ligands of cytochrome c oxidase. Methods in Enzymology, 1978, 53, 191-201.	1.0	18
140	The effect of hypoxia and catecholamines on regional expression of heat-shock protein-72 mRNA in neonatal piglet brain. Brain Research, 1996, 727, 145-152.	2.2	18
141	Phosphorescence lifetime imaging in turbid media: the inverse problem and experimental image reconstruction. Applied Optics, 2004, 43, 564.	2.1	18
142	Brain oxygenation and metabolism during selective cerebral perfusion in neonates. European Journal of Cardio-thoracic Surgery, 2006, 29, 168-174.	1.4	18
143	Effect of granulocyte-colony stimulating factor on expression of selected proteins involved in regulation of apoptosis in the brain of newborn piglets after cardiopulmonary bypass and deep hypothermic circulatory arrest. Journal of Thoracic and Cardiovascular Surgery, 2012, 143, 1436-1442.	0.8	18
144	The Oxygen Dependence of Cellular Energy Metabolism. Advances in Experimental Medicine and Biology, 1986, 194, 229-239.	1.6	18

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145	Regulation of metabolism: the rest-to-work transition in skeletal muscle. American Journal of Physiology - Endocrinology and Metabolism, 2015, 309, E793-E801.	3.5	17
146	Feasibility of diffuse optical imaging with long-lived luminescent probes. Optics Letters, 2006, 31, 1082.	3.3	16
147	The thermodynamic basis of glucose-stimulated insulin release: a model of the core mechanism. Physiological Reports, 2017, 5, e13327.	1.7	16
148	Glutamate dehydrogenase: role in regulating metabolism and insulin release in pancreatic Î²-cells. Journal of Applied Physiology, 2018, 125, 419-428.	2.5	16
149	Oxygen Dependent Quenching of Phosphorescence. Advances in Experimental Medicine and Biology, 1996, 388, 101-107.	1.6	15
150	Regulation of metabolism: the work-to-rest transition in skeletal muscle. American Journal of Physiology - Endocrinology and Metabolism, 2016, 310, E633-E642.	3.5	15
151	Metabolic homeostasis: oxidative phosphorylation and the metabolic requirements of higher plants and animals. Journal of Applied Physiology, 2018, 125, 1183-1192.	2.5	15
152	â€œDendriticâ€•Porphyrins. Advances in Experimental Medicine and Biology, 1997, , 657-662.	1.6	15
153	Binding of cytochrome c to cytochrome c - oxidase in intact mitochondria. A study with radioactive photoaffinity-labeled cytochrome c. Biochemical and Biophysical Research Communications, 1980, 92, 743-748.	2.1	14
154	The effect of thiol reagents on GABA transport in rat brain synaptosomes. FEBS Letters, 1984, 171, 303-308.	2.8	14
155	Role of intramitochondrial pH in the energetics and regulation of mitochondrial oxidative phosphorylation. Biochimica Et Biophysica Acta - Bioenergetics, 1991, 1058, 113-120.	1.0	14
156	Activity of Tyrosine Hydroxylase in the Striatum of Newborn Piglets in Response to Hypocapnic Hypoxia. Journal of Neurochemistry, 1993, 60, 1399-1405.	3.9	14
157	Oxygen dependence of glucose sensing: role in glucose homeostasis and related pathology. Journal of Applied Physiology, 2019, 126, 1746-1755.	2.5	14
158	Oxygen Pressures in the Interstitial Space of Skeletal Muscle and Tumors in vivo. Advances in Experimental Medicine and Biology, 2008, 614, 53-62.	1.6	14
159	Evidence for a structural interacti on betwen ATP synthetase and cytochrome c oxidase in mitochondria. Archives of Biochemistry and Biophysics, 1974, 163, 491-497.	3.0	13
160	Resuscitation with 100%, compared with 21%, oxygen following brief, repeated periods of apnea can protect vulnerable neonatal brain regions from apoptotic injury. Resuscitation, 2008, 76, 261-270.	3.0	13
161	Impact of sodium glucose linked cotransporterâ€2 inhibition on renal microvascular oxygen tension in a rodent model of diabetes mellitus. Physiological Reports, 2021, 9, e14890.	1.7	13
162	Brain Oxygenation During Cardiopulmonary Bypass and Circulatory Arrest. Advances in Experimental Medicine and Biology, 2003, 510, 325-330.	1.6	13

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163	Regulation of in Vivo Mitochondrial Oxidative Phosphorylation. , 1982, , 349-355.		13
164	The effect of cholinergic agonists on coronary flow rate and oxygen consumption in isolated perfused rat heart. Journal of Molecular and Cellular Cardiology, 1985, 17, 31-42.	1.9	12
165	The effects of induced apneic episodes on cerebral cortical oxygenation in newborn piglets. Brain Research, 1996, 741, 160-165.	2.2	12
166	Brain oxygen and metabolism is dependent on the rate of low-flow cardiopulmonary bypass following circulatory arrest in newborn pigletsâ˜†. European Journal of Cardio-thoracic Surgery, 2007, 31, 899-905.	1.4	12
167	Measuring Oxygen in Living Tissue: Intravascular, Interstitial, and â€œTissueâ€•Oxygen Measurements. Advances in Experimental Medicine and Biology, 2011, 701, 53-59.	1.6	12
168	Oxygen-dependent quenching of phosphorescence used to characterize improved myocardial oxygenation resulting from vasculogenic cytokine therapy. Journal of Applied Physiology, 2011, 110, 1460-1465.	2.5	12
169	Kainate-induced uptake of calcium by synaptosomes from rat brain. FEBS Letters, 1985, 192, 61-65.	2.8	11
170	Effects of dl-2-Amino-5-Phosphonovalerate on Metabolism of Catecholamines in Synaptosomes from Rat Brain. Journal of Neurochemistry, 1989, 52, 54-60.	3.9	11
171	3,4-Dihydroxyphenylalanine (DOPA) metabolism and retinoic acid induced differentiation in human neuroblastoma. Neurochemical Research, 1994, 19, 1487-1494.	3.3	11
172	Imaging Oxygen Pressure in the Retina of the Mouse Eye. Advances in Experimental Medicine and Biology, 2005, 566, 159-165.	1.6	11
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