Peter B Frappell

List of Publications by Year
in descending order

111 papers	3,668 citations	126907 33 h-index	149698 56 g-index
111 all docs	111 docs citations	111 times ranked	3378 citing authors

#	Article	IF	Citations
1	Different strategies for convective O2 transport in high altitude birds: A graphical analysis. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2021, 253, 110871.	1.8	7
2	Respiratory characteristics of the tammar wallaby pouch young and functional limitations in a newborn with skin gas exchange. Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology, 2021, 191, 995-1006.	1.5	4
3	Use beer to calibrate your CO2 analyser: celebrate!. Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology, 2021, 191, 979-982.	1.5	1
4	Aerobic and anaerobic movement energetics of hybrid and pure parental abalone. Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology, 2021, 191, 1111-1124.	1.5	2
5	The effects of constant and cyclical hypoxia on the survival, growth and metabolic physiology of incubating Atlantic salmon (Salmo salar). Aquaculture, 2020, 527, 735449.	3.5	12
6	Cardiovascular responses to progressive hypoxia in ducks native to high altitude in the Andes. Journal of Experimental Biology, 2020, 223, .	1.7	11
7	Impacts of â€œsupermoonâ€•events on the physiology of a wild bird. Ecology and Evolution, 2019, 9, 7974-7984.	1.9	16
8	Control of breathing and respiratory gas exchange in ducks native to high altitude in the Andes. Journal of Experimental Biology, 2019, 222, .	1.7	11
9	Acute but not chronic hyperoxia increases metabolic rate without altering the cardiorespiratory response in Atlantic salmon alevins. Aquaculture, 2019, 502, 189-195.	3.5	5
10	Physiological effects of dissolved oxygen are stage-specific in incubating Atlantic salmon (Salmo) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 3 2019, 189, 109-120.	1.5	12
11	Developmental Hypoxia Has Negligible Effects on Long-Term Hypoxia Tolerance and Aerobic Metabolism of Atlantic Salmon (Salmo salar). Physiological and Biochemical Zoology, 2017, 90, 494-501.	1.5	18
12	Respiratory mechanics of eleven avian species resident at high and low altitude. Journal of Experimental Biology, 2017, 220, 1079-1089.	1.7	23
13	Divergent respiratory and cardiovascular responses to hypoxia in bar-headed geese and Andean birds. Journal of Experimental Biology, 2017, 220, 4186-4194.	1.7	34
14	Do Bar-Headed Geese Train for High Altitude Flights?. Integrative and Comparative Biology, 2017, 57, 240-251.	2.0	8
15	Î±4-Containing nicotinic receptors contribute to the effects of perinatal nicotine on ventilatory and metabolic responses of neonatal mice to ambient cooling. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2016, 311, R727-R734.	1.8	2
16	Automated Non-invasive Video-Microscopy of Oyster Spat Heart Rate during Acute Temperature Change: Impact of Acclimation Temperature. Frontiers in Physiology, 2016, 7, 236.	2.8	12
17	Associations between Resting, Activity, and Daily Metabolic Rate in Free-Living Endotherms: No Universal Rule in Birds and Mammals. Physiological and Biochemical Zoology, 2016, 89, 251-261.	1.5	41
18	The maternal effect of differences in egg size influence metabolic rate and hypoxia induced hatching in Atlantic salmon eggs: implications for respiratory gas exchange across the egg capsule. Canadian Journal of Fisheries and Aquatic Sciences, 2016, 73, 1173-1181.	1.4	11

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19	The roller coaster flight strategy of bar-headed geese conserves energy during Himalayan migrations. Science, 2015, 347, 250-254.	12.6	165
20	Pregnancy limits lung function during exercise and depresses metabolic rate in the skink Tiliqua nigrolutea. Journal of Experimental Biology, 2015, 218, 931-939.	1.7	6
21	How Bar-Headed Geese Fly Over the Himalayas. Physiology, 2015, 30, 107-115.	3.1	104
22	Prenatal nicotine exposure increases hyperventilation in Î±4-knock-out mice during mild asphyxia. Respiratory Physiology and Neurobiology, 2015, 208, 29-36.	1.6	3
23	Maximum Running Speed of Captive Bar-Headed Geese Is Unaffected by Severe Hypoxia. PLoS ONE, 2014, 9, e94015.	2.5	30
24	Acid-base balance in the developing marsupial: from ectotherm to endotherm. Journal of Applied Physiology, 2014, 116, 1210-1219.	2.5	5
25	Fluctuations in oxygen influence facultative endothermy in bumblebees. Journal of Experimental Biology, 2014, 217, 3834-3842.	1.7	5
26	Growth hormone transgenesis and polyploidy increase metabolic rate, alter the cardiorespiratory response and influence HSP expression to acute hypoxia in Atlantic salmon (Salmo salar) yolk-sac alevins. Journal of Experimental Biology, 2014, 217, 2268-76.	1.7	9
27	Novel method for conscious airway resistance and ventilation estimation in neonatal rodents using plethysmography and a mechanical lung. Respiratory Physiology and Neurobiology, 2014, 201, 75-83.	1.6	11
28	The paradox of extreme high-altitude migration in bar-headed geeseAnser indicus. Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20122114.	2.6	75
29	An increase in minimum metabolic rate and not activity explains field metabolic rate changes in a breeding seabird. Journal of Experimental Biology, 2013, 216, 1726-35.	1.7	18
30	Measurements of air ventilation in small vertebrates. Respiratory Physiology and Neurobiology, 2013, 186, 197-205.	1.6	26
31	Respirometry: Correcting for Diffusion and Validating the Use of Plastic Multiwell Plates with Integrated Optodes. Physiological and Biochemical Zoology, 2013, 86, 588-592.	1.5	6
32	Phase Contrast Imaging Reveals Low Lung Volumes and Surface Areas in the Developing Marsupial. PLoS ONE, 2013, 8, e53805.	2.5	6
33	Video Microscopy Detection of Oyster Spat Heart Rate (HR): Acclimation temperature alters HR response to acute temperature change. FASEB Journal, 2013, 27, 714.9.	0.5	0
34	The accessory role of the diaphragmaticus muscle in lung ventilation in the estuarine crocodile Crocodylus porosus. Journal of Experimental Biology, 2012, 215, 845-852.	1.7	22
35	The ventilatory response to hypoxia and hypercapnia is absent in the neonatal fat-tailed dunnart. Journal of Experimental Biology, 2012, 215, 4242-7.	1.7	4
36	Phylogenetic differences of mammalian basal metabolic rate are not explained by mitochondrial basal proton leak. Proceedings of the Royal Society B: Biological Sciences, 2012, 279, 185-193.	2.6	30

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37	Metabolic cold adaptation in fishes occurs at the level of whole animal, mitochondria and enzyme. Proceedings of the Royal Society B: Biological Sciences, 2012, 279, 1740-1747.	2.6	112
38	An information-theoretic approach to evaluating the size and temperature dependence of metabolic rate. Proceedings of the Royal Society B: Biological Sciences, 2012, 279, 3616-3621.	2.6	36
39	Absence of adaptive nonshivering thermogenesis in a marsupial, the fat-tailed dunnart (Sminthopsis) Tj ETQq1 1 0.784314 rgBT /Over Physiology, 2012, 182, 393-401.	1.5	26
40	Fluctuations in oxygen influences facultative endothermy in bumblebees. FASEB Journal, 2012, 26, 1071.4.	0.5	0
41	Point: High Altitude is for the Birds!. Journal of Applied Physiology, 2011, 111, 1514-1515.	2.5	13
42	Last Word on Point:Counterpoint: High altitude is/is not for the birds!. Journal of Applied Physiology, 2011, 111, 1525-1525.	2.5	0
43	The trans-Himalayan flights of bar-headed geese (Anser indicus). Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 9516-9519.	7.1	135
44	Structural and Functional Development of the Respiratory System in a Newborn Marsupial with Cutaneous Gas Exchange. Physiological and Biochemical Zoology, 2011, 84, 634-649.	1.5	22
45	Simultaneous biologging of heart rate and acceleration, and their relationships with energy expenditure in free-swimming sockeye salmon (Oncorhynchus nerka). Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology, 2010, 180, 673-684.	1.5	116
46	Do implanted data-loggers affect the time spent at sea by Little Penguins (Eudyptula minor) during winter?. Emu, 2010, 110, 71-77.	0.6	7
47	Physiological Responses of Free-Swimming Adult Coho Salmon to Simulated Predator and Fisheries Encounters. Physiological and Biochemical Zoology, 2010, 83, 973-983.	1.5	61
48	Does Incubation Temperature Fluctuation Influence Hatchling Phenotypes in Reptiles? A Test Using Parthenogenetic Geckos. Physiological and Biochemical Zoology, 2010, 83, 597-607.	1.5	19
49	Predicting the rate of oxygen consumption from heart rate in barnacle geeseBranta leucopsis: effects of captivity and annual changes in body condition. Journal of Experimental Biology, 2009, 212, 2941-2948.	1.7	23
50	Estimating energy expenditure of animals using the accelerometry technique: activity, inactivity and comparison with the heart-rate technique. Journal of Experimental Biology, 2009, 212, 471-482.	1.7	123
51	Accelerometry to Estimate Energy Expenditure during Activity: Best Practice with Data Loggers. Physiological and Biochemical Zoology, 2009, 82, 396-404.	1.5	115
52	Sex differences in circulatory oxygen transport parameters of sockeye salmon (Oncorhynchus nerka) on the spawning ground. Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology, 2009, 179, 663-671.	1.5	39
53	Conditional expression of central respiratory rhythm in developing fatâ€tailed dunnarts (Marsupialia:) Tj ETQq1 1 0.784314 rgBT /Over	0.5	0
54	Ontogeny and allometry of metabolic rate and ventilation in the marsupial: Matching supply and demand from ectothermy to endothermy. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2008, 150, 181-188.	1.8	16

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55	Central nitric oxide synthase inhibition restores behaviorally mediated lipopolysaccharide induced fever in near-term rats. Physiology and Behavior, 2008, 94, 630-634.	2.1	6
56	Phenotypic differences in terrestrial frog embryos: effect of water potential and phase. Journal of Experimental Biology, 2008, 211, 3800-3807.	1.7	5
57	Marsupial uncoupling protein 1 sheds light on the evolution of mammalian nonshivering thermogenesis. Physiological Genomics, 2008, 32, 161-169.	2.3	76
58	Moving with the beat: heart rate and visceral temperature of free-swimming and feeding bluefin tuna. Proceedings of the Royal Society B: Biological Sciences, 2008, 275, 2841-2850.	2.6	43
59	Characterizing the breathâ€toâ€breath hypercapnic ventilatory response in neonatal rats. FASEB Journal, 2008, 22, 955.9.	0.5	1
60	Improving the Precision and Accuracy for Estimating Energy Expenditure Using the Heart Rate Method. Physiological and Biochemical Zoology, 2007, 80, 551-555.	1.5	8
61	Oxygen transport at high altitudeâ€"An integrated perspective. Respiratory Physiology and Neurobiology, 2007, 158, 115-120.	1.6	10
62	Development of the respiratory system in marsupials. Respiratory Physiology and Neurobiology, 2006, 154, 252-267.	1.6	33
63	Factors influencing the prediction of metabolic rate in a reptile. Functional Ecology, 2006, 20, 105-113.	3.6	28
64	Physiological Response to Feeding in Little Penguins. Physiological and Biochemical Zoology, 2006, 79, 1088-1097.	1.5	17
65	Digestive state influences the heart rate hysteresis and rates of heat exchange in the varanid lizard Varanus rosenbergi. Journal of Experimental Biology, 2005, 208, 2269-2276.	1.7	13
66	Factorial Aerobic Scope Is Independent of Temperature and Primarily Modulated by Heart Rate in Exercising Murray Cod (Maccullochella peelii peelii). Physiological and Biochemical Zoology, 2005, 78, 347-355.	1.5	58
67	Development of mechanics and pulmonary reflexes. Respiratory Physiology and Neurobiology, 2005, 149, 143-154.	1.6	33
68	Minimal Metabolic Rate, What It Is, Its Usefulness, and Its Relationship to the Evolution of Endothermy: A Brief Synopsis. Physiological and Biochemical Zoology, 2004, 77, 865-868.	1.5	58
69	Hypothermia and hypoxia inhibit the Hering-BreÃ¼er reflex in the marsupial newborn. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2004, 286, R857-R864.	1.8	6
70	Siah2 Regulates Stability of Prolyl-Hydroxylases, Controls HIF1Î± Abundance, and Modulates Physiological Responses to Hypoxia. Cell, 2004, 117, 941-952.	28.9	381
71	Ventilation and metabolic rate in the platypus: insights into the evolution of the mammalian breathing pattern. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2003, 136, 943-955.	1.8	12
72	Ventilation and Metabolism in a Large Semifossorial Marsupial:The Effect of Graded Hypoxia and Hypercapnia. Physiological and Biochemical Zoology, 2002, 75, 77-82.	1.5	20

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73	The respiratory system in varanid lizards: determinants of O2 transfer. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2002, 133, 239-258.	1.8	20
74	The relationship between heart rate and rate of oxygen consumption in Galapagos marine iguanas (Amblyrhynchus cristatus)at two different temperatures. Journal of Experimental Biology, 2002, 205, 1917-1924.	1.7	37
75	Oxygen transfer during aerobic exercise in a varanid lizardVaranus mertensiis limited by the circulation. Journal of Experimental Biology, 2002, 205, 2725-2736.	1.7	41
76	Mechanics of the respiratory system in the newborn tammar wallaby. Journal of Experimental Biology, 2002, 205, 533-538.	1.7	25
77	Mechanics of the respiratory system in the newborn tammar wallaby. Journal of Experimental Biology, 2002, 205, 533-8.	1.7	18
78	The relationship between heart rate and rate of oxygen consumption in Galapagos marine iguanas (Amblyrhynchus cristatus) at two different temperatures. Journal of Experimental Biology, 2002, 205, 1917-24.	1.7	27
79	Oxygen transfer during aerobic exercise in a varanid lizard Varanus mertensi is limited by the circulation. Journal of Experimental Biology, 2002, 205, 2725-36.	1.7	24
80	Convection requirement is established by total metabolic rate in the newborn tammar wallaby. Respiration Physiology, 2001, 126, 221-231.	2.7	20
81	Behavioral thermoregulation in obese and lean Zucker rats in a thermal gradient. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2001, 281, R1675-R1680.	1.8	15
82	Scaling of Respiratory Variables and the Breathing Pattern in Birds: An Allometric and Phylogenetic Approach. Physiological and Biochemical Zoology, 2001, 74, 75-89.	1.5	71
83	Energetics of terrestrial locomotion of the platypus Ornithorhynchus anatinus. Journal of Experimental Biology, 2001, 204, 797-803.	1.7	28
84	The influence of locomotion on air-sac pressures in little penguins. Journal of Experimental Biology, 2001, 204, 3581-6.	1.7	7
85	The Influence of Haemoglobin on Behavioural Thermoregulation and Oxygen Consumption inDaphnia carinata. Physiological and Biochemical Zoology, 2000, 73, 153-160.	1.5	33
86	Birth weight and altitude: A study in Peruvian communities. Journal of Pediatrics, 2000, 136, 324-329.	1.8	108
87	Respiratory function in a newborn marsupial with skin gas exchange. Respiration Physiology, 2000, 120, 35-45.	2.7	52
88	Ventilatory Responses to Changes in Temperature in Mammals and Other Vertebrates. Annual Review of Physiology, 2000, 62, 847-874.	13.1	68
89	Breathing through skin in a newborn mammal. Nature, 1999, 397, 660-660.	27.8	67
90	Do lizards breathe through their mouths while running?. Experimental Biology Online, 1999, 4, 1-46.	1.0	4

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91	Heart rate variability in 1-day-old infants born at 4330 m altitude. Clinical Science, 1999, 96, 147-153.	4.3	2
92	Experimental Biology 1997 Symposium on Neurobiology of Thermoregulation: Role of Stress: HYPOTHERMIA AND PHYSIOLOGICAL CONTROL: THE RESPIRATORY SYSTEM. Clinical and Experimental Pharmacology and Physiology, 1998, 25, 159-164.	1.9	12
93	Ventilatory, cardiovascular and metabolic responses to hypoxia and hypercapnia in the armadillo. Respiration Physiology, 1998, 113, 101-109.	2.7	27
94	How stiff is the armadillo?. Respiration Physiology, 1998, 113, 111-122.	2.7	14
95	Response to Cooling Temperature in Infants Born at an Altitude of 4,330 Meters. American Journal of Respiratory and Critical Care Medicine, 1998, 158, 1751-1756.	5.6	35
96	The Effects of Environmental Temperature, Hypoxia, and Hypercapnia on the Breathing Pattern of Saltwater Crocodiles (Crocodylus porosus). Physiological Zoology, 1998, 71, 267-273.	1.5	21
97	On the barometric method for measurements of ventilation, and its use in small animals. Canadian Journal of Physiology and Pharmacology, 1998, 76, 937-944.	1.4	58
98	Passive body movement and gas exchange in the frilled lizard (Chlamydosaurus kingii) and goanna (Varanus gouldii).. Journal of Experimental Biology, 1998, 201, 2307-2311.	1.7	4
99	Passive body movement and gas exchange in the frilled lizard (Chlamydosaurus kingii) and goanna (Varanus gouldii). Journal of Experimental Biology, 1998, 201, 2307-11.	1.7	3
100	Energetics of swimming by the platypus Ornithorhynchus anatinus: metabolic effort associated with rowing. Journal of Experimental Biology, 1997, 200, 2647-52.	1.7	16
101	Scaling of respiratory variables and the breathing pattern in adult marsupials. Respiration Physiology, 1995, 100, 83-90.	2.7	29
102	Ventilatory and metabolic responses to hypoxia in the echidna, Tachyglossus aculeatus. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 1994, 267, R1510-R1515.	1.8	10
103	Hamsters vs. rats: metabolic and ventilatory response to development in chronic hypoxia. Journal of Applied Physiology, 1994, 77, 2748-2752.	2.5	37
104	Ventilatory and Metabolic Responses to Acute Hyperoxia in Newborns. The American Review of Respiratory Disease, 1992, 146, 11-15.	2.9	55
105	Metabolism during normoxia, hyperoxia, and recovery in newborn rats. Canadian Journal of Physiology and Pharmacology, 1992, 70, 408-411.	1.4	31
106	Metabolism during normoxia, hypoxia and recovery in the newborn kitten. Respiration Physiology, 1991, 86, 115-124.	2.7	53
107	Temperature effects on ventilation and metabolism in the lizard, Ctenophorus nuchalis. Respiration Physiology, 1991, 86, 257-270.	2.7	35
108	Ventilation and Oxygen Consumption in Agamid Lizards. Physiological Zoology, 1991, 64, 985-1001.	1.5	25

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109	Understanding respirometry chambers: What goes in must come out. Journal of Theoretical Biology, 1989, 138, 479-494.	1.7	55
110	Respiratory mechanics in small newborn mammals. Respiration Physiology, 1989, 76, 25-36.	2.7	21
111	Changes in metabolic rates and blood respiratory characteristics during pouch development of a marsupial, Macropus eugenii. Respiration Physiology, 1988, 72, 219-228.	2.7	34