Vsevolod Y Polotsky

List of Publications by Year
in descending order

138 papers	10,407 citations	34016 52 h-index	33814 99 g-index
140 all docs	140 docs citations	140 times ranked	8584 citing authors

#	Article	IF	Citations
1	Sleep Apnea. Journal of the American College of Cardiology, 2017, 69, 841-858.	1.2	872
2	Obstructive Sleep Apnea. Journal of the American College of Cardiology, 2013, 62, 569-576.	1.2	586
3	Obesity and Obstructive Sleep Apnea: Pathogenic Mechanisms and Therapeutic Approaches. Proceedings of the American Thoracic Society, 2008, 5, 185-192.	3.5	524
4	Chronic Intermittent Hypoxia Induces Atherosclerosis. American Journal of Respiratory and Critical Care Medicine, 2007, 175, 1290-1297.	2.5	347
5	Intermittent Hypoxia Increases Insulin Resistance in Genetically Obese Mice. Journal of Physiology, 2003, 552, 253-264.	1.3	331
6	Disorders of glucose metabolism in sleep apnea. Journal of Applied Physiology, 2005, 99, 1998-2007.	1.2	329
7	Intermittent Hypoxia Causes Insulin Resistance in Lean Mice Independent of Autonomic Activity. American Journal of Respiratory and Critical Care Medicine, 2007, 175, 851-857.	2.5	315
8	Intermittent Hypoxia Induces Hyperlipidemia in Lean Mice. Circulation Research, 2005, 97, 698-706.	2.0	274
9	Obstructive Sleep Apnea. Chest, 2011, 140, 534-542.	0.4	264
10	Chronic intermittent hypoxia predisposes to liver injury. Hepatology, 2007, 45, 1007-1013.	3.6	242
11	The Impact of Obstructive Sleep Apnea on Metabolic and Inflammatory Markers in Consecutive Patients with Metabolic Syndrome. PLoS ONE, 2010, 5, e12065.	1.1	216
12	Hyperlipidemia and lipid peroxidation are dependent on the severity of chronic intermittent hypoxia. Journal of Applied Physiology, 2007, 102, 557-563.	1.2	215
13	Sleep-disordered breathing, glucose intolerance, and insulin resistance. Respiratory Physiology and Neurobiology, 2003, 136, 167-178.	0.7	191
14	Obstructive Sleep Apnea, Insulin Resistance, and Steatohepatitis in Severe Obesity. American Journal of Respiratory and Critical Care Medicine, 2009, 179, 228-234.	2.5	184
15	Intermittent Hypoxia Exacerbates Metabolic Effects of Dietâ€Induced Obesity. Obesity, 2011, 19, 2167-2174.	1.5	180
16	Metabolic consequences of intermittent hypoxia: Relevance to obstructive sleep apnea. Best Practice and Research in Clinical Endocrinology and Metabolism, 2010, 24, 843-851.	2.2	179
17	Chronic intermittent hypoxia upregulates genes of lipid biosynthesis in obese mice. Journal of Applied Physiology, 2005, 99, 1643-1648.	1.2	174
18	Chronic intermittent hypoxia causes hepatitis in a mouse model of diet-induced fatty liver. American Journal of Physiology - Renal Physiology, 2007, 293, G871-G877.	1.6	173

#	Article	IF	Citations
19	Disruption of Nrf2, a Key Inducer of Antioxidant Defenses, Attenuates ApoE-Mediated Atherosclerosis in Mice. PLoS ONE, 2008, 3, e3791.	1.1	156
20	Chronic Intermittent Hypoxia Induces Atherosclerosis via Activation of Adipose Angiopoietin-like 4. American Journal of Respiratory and Critical Care Medicine, 2013, 188, 240-248.	2.5	155
21	Hypoxia-Inducible Factors and Cancer. Current Sleep Medicine Reports, 2017, 3, 1-10.	0.7	154
22	Altered metabolic responses to intermittent hypoxia in mice with partial deficiency of hypoxia-inducible factor-1Î±. Physiological Genomics, 2006, 25, 450-457.	1.0	153
23	Inflammation in sleep apnea: An update. Reviews in Endocrine and Metabolic Disorders, 2015, 16, 25-34.	2.6	153
24	Effects of different acute hypoxic regimens on tissue oxygen profiles and metabolic outcomes. Journal of Applied Physiology, 2011, 111, 881-890.	1.2	149
25	Effect of intermittent hypoxia on atherosclerosis in apolipoprotein E-deficient mice. Atherosclerosis, 2010, 209, 381-386.	0.4	146
26	Dyslipidemia and Atherosclerosis Induced by Chronic Intermittent Hypoxia Are Attenuated by Deficiency of Stearoyl Coenzyme A Desaturase. Circulation Research, 2008, 103, 1173-1180.	2.0	132
27	Intermittent hypoxia inhibits clearance of triglyceride-rich lipoproteins and inactivates adipose lipoprotein lipase in a mouse model of sleep apnoea. European Heart Journal, 2012, 33, 783-790.	1.0	124
28	Obstructive sleep apnea and dyslipidemia: implications for atherosclerosis. Current Opinion in Endocrinology, Diabetes and Obesity, 2010, 17, 161-165.	1.2	116
29	Intermittent hypoxia has organ-specific effects on oxidative stress. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2008, 295, R1274-R1281.	0.9	105
30	Intermittent hypoxia causes REM sleep deficits and decreases EEG delta power in NREM sleep in the C57BL/6J mouse. Sleep Medicine, 2006, 7, 7-16.	0.8	104
31	Intermittent Hypoxia Impairs Glucose Homeostasis in C57BL6/J Mice: Partial Improvement with Cessation of the Exposure. Sleep, 2013, 36, 1483-1490.	0.6	103
32	Obstructive Sleep Apnea Dynamically Increases Nocturnal Plasma Free Fatty Acids, Glucose, and Cortisol During Sleep. Journal of Clinical Endocrinology and Metabolism, 2017, 102, 3172-3181.	1.8	99
33	Translational approaches to understanding metabolic dysfunction and cardiovascular consequences of obstructive sleep apnea. American Journal of Physiology - Heart and Circulatory Physiology, 2015, 309, H1101-H1111.	1.5	90
34	Metabolic Consequences of Sleep-Disordered Breathing. ILAR Journal, 2009, 50, 289-306.	1.8	88
35	Interaction of Human Mannoseâ€Binding Protein withMycobacterium avium. Journal of Infectious Diseases, 1997, 175, 1159-1168.	1.9	86
36	Hepatocyte Hypoxia Inducible Factor-1 Mediates the Development of Liver Fibrosis in a Mouse Model of Nonalcoholic Fatty Liver Disease. PLoS ONE, 2016, 11, e0168572.	1.1	81

#	Article	IF	Citations
37	Leptin and Leptin Resistance in the Pathogenesis of Obstructive Sleep Apnea: A Possible Link to Oxidative Stress and Cardiovascular Complications. Oxidative Medicine and Cellular Longevity, 2018, 2018, 1-8.	1.9	77
38	Acute hypoxia induces hypertriglyceridemia by decreasing plasma triglyceride clearance in mice. American Journal of Physiology - Endocrinology and Metabolism, 2012, 303, E377-E388.	1.8	73
39	Sleep Disorders and the Development of Insulin Resistance and Obesity. Endocrinology and Metabolism Clinics of North America, 2013, 42, 617-634.	1.2	73
40	Effects of leptin and obesity on the upper airway function. Journal of Applied Physiology, 2012, 112, 1637-1643.	1.2	70
41	Impact of interrupted leptin pathways on ventilatory control. Journal of Applied Physiology, 2004, 96, 991-998.	1.2	69
42	Cardiovascular Aspects in Obstructive Sleep Apnea Syndrome â€“ Molecular Issues, Hypoxia and Cytokine Profiles. Respiration, 2009, 78, 361-370.	1.2	68
43	Effect of deficiency in SREBP cleavage-activating protein on lipid metabolism during intermittent hypoxia. Physiological Genomics, 2007, 31, 273-280.	1.0	65
44	Metabolic Effects of Late Dinner in Healthy Volunteersâ€”A Randomized Crossover Clinical Trial. Journal of Clinical Endocrinology and Metabolism, 2020, 105, 2789-2802.	1.8	62
45	Effects of Sleep Apnea on Nocturnal Free Fatty Acids in Subjects with Heart Failure. Sleep, 2011, 34, 1207-1213.	0.6	61
46	Obstructive Sleep Apnea and Non-Alcoholic Fatty Liver Disease: Is the Liver Another Target?. Frontiers in Neurology, 2012, 3, 149.	1.1	61
47	Lysyl Oxidase as a Serum Biomarker of Liver Fibrosis in Patients with Severe Obesity and Obstructive Sleep Apnea. Sleep, 2015, 38, 1583-1591.	0.6	58
48	Intermittent and sustained hypoxia induce a similar gene expression profile in human aortic endothelial cells. Physiological Genomics, 2010, 41, 306-314.	1.0	57
49	Effect of chronic intermittent hypoxia on triglyceride uptake in different tissues. Journal of Lipid Research, 2013, 54, 1058-1065.	2.0	56
50	Intranasal Leptin Relieves Sleep-disordered Breathing in Mice with Diet-induced Obesity. American Journal of Respiratory and Critical Care Medicine, 2019, 199, 773-783.	2.5	56
51	Intermittent hypoxia-induced glucose intolerance is abolished by Î±-adrenergic blockade or adrenal medullectomy. American Journal of Physiology - Endocrinology and Metabolism, 2014, 307, E1073-E1083.	1.8	55
52	Carotid body denervation prevents fasting hyperglycemia during chronic intermittent hypoxia. Journal of Applied Physiology, 2014, 117, 765-776.	1.2	55
53	Metabolic dysfunction in obstructive sleep apnea: A critical examination of underlying mechanisms. Sleep and Biological Rhythms, 2015, 13, 2-17.	0.5	55
54	Metabolic Consequences of High-Fat Diet Are Attenuated by Suppression of HIF-1Î±. PLoS ONE, 2012, 7, e46562.	1.1	55

#	Article	IF	Citations
55	Basis for substrate specificity of the Toxoplasma gondii nucleoside triphosphate hydrolase. Molecular and Biochemical Parasitology, 1998, 97, 209-220.	0.5	54
56	Leptin Induces Hypertension Acting on Transient Receptor Potential Melastatin 7 Channel in the Carotid Body. Circulation Research, 2019, 125, 989-1002.	2.0	53
57	Sleep Apnea Research in Animals. Past, Present, and Future. American Journal of Respiratory Cell and Molecular Biology, 2016, 54, 299-305.	1.4	52
58	Localizing Effects of Leptin on Upper Airway and Respiratory Control during Sleep. Sleep, 2016, 39, 1097-1106.	0.6	48
59	Leptin acts in the carotid bodies to increase minute ventilation during wakefulness and sleep and augment the hypoxic ventilatory response. Journal of Physiology, 2019, 597, 151-172.	1.3	47
60	New frontiers in obstructive sleep apnoea. Clinical Science, 2014, 127, 209-216.	1.8	46
61	Serum from obstructive sleep apnea patients induces inflammatory responses in coronary artery endothelial cells. Atherosclerosis, 2016, 254, 59-66.	0.4	45
62	Leptin and the control of pharyngeal patency during sleep in severe obesity. Journal of Applied Physiology, 2014, 116, 1334-1341.	1.2	43
63	Chronic intermittent hypoxia and acetaminophen induce synergistic liver injury in mice. Experimental Physiology, 2009, 94, 228-239.	0.9	40
64	Neurostimulation Treatment of OSA. Chest, 2018, 154, 1435-1447.	0.4	39
65	Increased Cardiometabolic Risk and Worsening Hypoxemia at High Altitude. High Altitude Medicine and Biology, 2016, 17, 93-100.	0.5	38
66	Cross-Sectional Comparison of Sleep-Disordered Breathing in Native Peruvian Highlanders and Lowlanders. High Altitude Medicine and Biology, 2017, 18, 11-19.	0.5	37
67	Disturbed sleep and diabetes: A potential nexus of dementia risk. Metabolism: Clinical and Experimental, 2018, 84, 85-93.	1.5	37
68	Sleep-disordered breathing in C57BL/6J mice with diet-induced obesity. Sleep, 2018, 41, .	0.6	37
69	Differences in Sleep-induced Hypoxia between A/J and DBA/2J Mouse Strains. American Journal of Respiratory and Critical Care Medicine, 2003, 168, 1520-1527.	2.5	35
70	Effect of age and weight on upper airway function in a mouse model. Journal of Applied Physiology, 2011, 111, 696-703.	1.2	35
71	Chemogenetic stimulation of the hypoglossal neurons improves upper airway patency. Scientific Reports, 2017, 7, 44392.	1.6	35
72	Sleep-Disordered Breathing and Metabolic Effects: Evidence from Animal Models. Sleep Medicine Clinics, 2007, 2, 263-277.	1.2	34

#	Article	IF	Citations
73	Chronic intermittent hypoxia induces lung growth in adult mice. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2011, 300, L266-L273.	1.3	34
74	Restoring leptin signaling reduces hyperlipidemia and improves vascular stiffness induced by chronic intermittent hypoxia. American Journal of Physiology - Heart and Circulatory Physiology, 2011, 300, H1467-H1476.	1.5	34
75	Adipose HIF-1Î± causes obesity by suppressing brown adipose tissue thermogenesis. Journal of Molecular Medicine, 2017, 95, 287-297.	1.7	34
76	Thermoneutrality modifies the impact of hypoxia on lipid metabolism. American Journal of Physiology - Endocrinology and Metabolism, 2013, 304, E424-E435.	1.8	30
77	The effect of adrenal medullectomy on metabolic responses to chronic intermittent hypoxia. Respiratory Physiology and Neurobiology, 2014, 203, 60-67.	0.7	30
78	Obstructive sleep apnea and effects of continuous positive airway pressure on triglyceride-rich lipoprotein metabolism. Journal of Lipid Research, 2018, 59, 1027-1033.	2.0	30
79	Lipid Metabolism: A New Frontier in Sleep Apnea Research. American Journal of Respiratory and Critical Care Medicine, 2011, 184, 288-290.	2.5	29
80	Designer Receptors Exclusively Activated by Designer Drugs Approach to Treatment of Sleep-disordered Breathing. American Journal of Respiratory and Critical Care Medicine, 2021, 203, 102-110.	2.5	25
81	Macrophage A2A Adenosinergic Receptor Modulates Oxygen-Induced Augmentation of Murine Lung Injury. American Journal of Respiratory Cell and Molecular Biology, 2013, 48, 635-646.	1.4	24
82	Sleep Apnea Determines Soluble TNF-Î± Receptor 2 Response to Massive Weight Loss. Obesity Surgery, 2011, 21, 1413-1423.	1.1	23
83	Intranasal Leptin Prevents Opioid-induced Sleep-disordered Breathing in Obese Mice. American Journal of Respiratory Cell and Molecular Biology, 2020, 63, 502-509.	1.4	23
84	Neuromechanical control of the isolated upper airway of mice. Journal of Applied Physiology, 2008, 105, 1237-1245.	1.2	21
85	Direct projections from hypothalamic orexin neurons to brainstem cardiac vagal neurons. Neuroscience, 2016, 339, 47-53.	1.1	21
86	High fat diet induces airway hyperresponsiveness in mice. Scientific Reports, 2018, 8, 6404.	1.6	21
87	Leptin receptor expression in the dorsomedial hypothalamus stimulates breathing during NREM sleep indb/dbmice. Sleep, 2021, 44, .	0.6	21
88	Hypoxia and hypercapnia inhibit hypothalamic orexin neurons in rats. Journal of Neurophysiology, 2016, 116, 2250-2259.	0.9	19
89	Silencing of Hypoglossal Motoneurons Leads to Sleep Disordered Breathing in Lean Mice. Frontiers in Neurology, 2018, 9, 962.	1.1	19
90	Optogenetic identification of hypothalamic orexin neuron projections to paraventricular spinally projecting neurons. American Journal of Physiology - Heart and Circulatory Physiology, 2017, 312, H808-H817.	1.5	17

#	Article	IF	Citations
91	Effect of adrenal medullectomy on metabolic responses to chronic intermittent hypoxia in the frequently sampled intravenous glucose tolerance test. Journal of Applied Physiology, 2017, 122, 767-774.	1.2	16
92	Intermittent Hypoxia Alters Gene Expression in Peripheral Blood Mononuclear Cells of Healthy Volunteers. PLoS ONE, 2015, 10, e0144725.	1.1	16
93	Behavioral and respiratory characteristics during sleep in neonatal DBA/2J and A/J mice. Brain Research, 2008, 1241, 84-91.	1.1	13
94	Carotid Body and Metabolic Syndrome: Mechanisms and Potential Therapeutic Targets. International Journal of Molecular Sciences, 2020, 21, 5117.	1.8	13
95	Leptin Induces Epigenetic Regulation of Transient Receptor Potential Melastatin 7 in Rat Adrenal Pheochromocytoma Cells. American Journal of Respiratory Cell and Molecular Biology, 2021, 65, 214-221.	1.4	13
96	Leptin-mediated neural targets in obesity hypoventilation syndrome. Sleep, 2022, 45, .	0.6	13
97	Update in Sleep-disordered Breathing 2016. American Journal of Respiratory and Critical Care Medicine, 2017, 195, 1561-1566.	2.5	12
98	Cardiometabolic correlates of sleep disordered breathing in Andean highlanders. European Respiratory Journal, 2017, 49, 1601705.	3.1	12
99	The Role of Animal Models in Developing Pharmacotherapy for Obstructive Sleep Apnea. Journal of Clinical Medicine, 2019, 8, 2049.	1.0	12
100	GABA and glycine neurons from the ventral medullary region inhibit hypoglossal motoneurons. Sleep, 2020, 43, .	0.6	11
101	Vertical sleeve gastrectomy improves ventilatory drive through a leptin-dependent mechanism. JCI Insight, 2019, 4, .	2.3	11
102	Pharmacological and Genetic Blockade ofTrpm7in the Carotid Body Treats Obesity-Induced Hypertension. Hypertension, 2021, 78, 104-114.	1.3	10
103	Leptin Receptor Blockade Attenuates Hypertension, but Does Not Affect Ventilatory Response to Hypoxia in a Model of Polygenic Obesity. Frontiers in Physiology, 2021, 12, 688375.	1.3	9
104	Mouse model of the metabolic syndrome: the quest continues. Journal of Applied Physiology, 2007, 102, 2088-2089.	1.2	8
105	Pharyngeal collapsibility during sleep is elevated in insulin-resistant females with morbid obesity. European Respiratory Journal, 2016, 47, 1718-1726.	3.1	8
106	The Effect of DREADD Activation of Leptin Receptor Positive Neurons in the Nucleus of the Solitary Tract on Sleep Disordered Breathing. International Journal of Molecular Sciences, 2021, 22, 6742.	1.8	8
107	Caloric restriction prevents the development of airway hyperresponsiveness in mice on a high fat diet. Scientific Reports, 2019, 9, 279.	1.6	7
108	Gene delivery to the hypoglossal motor system: preclinical studies and translational potential. Gene Therapy, 2021, 28, 402-412.	2.3	7

#	Article	IF	Citations
109	The effect of brain serotonin deficiency on breathing is magnified by age. Physiological Reports, 2022, 10, e15245.	0.7	7
110	Integrating loop gain into the understanding of obstructive sleep apnoea mechanisms. Journal of Physiology, 2018, 596, 3819-3820.	1.3	6
111	Effects of Dinner Timing on Sleep Stage Distribution and EEG Power Spectrum in Healthy Volunteers. Nature and Science of Sleep, 2021, Volume 13, 601-612.	1.4	6
112	Sleep and Sleep Loss: An Energy Paradox?. Sleep, 2012, 35, 1447-1448.	0.6	5
113	Are we waking up to the effects of NEFA?. Diabetologia, 2015, 58, 651-653.	2.9	5
114	Genome-Wide Association Studies in Obstructive Sleep Apnea. Will We Catch a Black Cat in a Dark Room?. American Journal of Respiratory and Critical Care Medicine, 2016, 194, 789-791.	2.5	5
115	Experimental Approach to Examine Leptin Signaling in the Carotid Bodies and its Effects on Control of Breathing. Journal of Visualized Experiments, 2019, , .	0.2	5
116	Pharmacotherapy of Obstructive Sleep Apnea: Is Salvation Just Around a Corner?. American Journal of Respiratory and Critical Care Medicine, 2019, 199, 1186-1187.	2.5	5
117	Obstructive sleep apnoea and susceptibility to cardiovascular disease: A blessing or curse of old age?. Respirology, 2020, 25, 242-243.	1.3	5
118	Intranasal leptin improves survival after opioid overdose in a mouse model. Journal of Translational Medicine, 2021, 19, 134.	1.8	5
119	Effect of Acute Intermittent CPAP Depressurization during Sleep in Obese Patients. PLoS ONE, 2016, 11, e0146606.	1.1	5
120	Metformin Alleviates Airway Hyperresponsiveness in a Mouse Model of Diet-Induced Obesity. Frontiers in Physiology, 2022, 13, 883275.	1.3	4
121	Immunogenicity of Two Types of Shigella flexneri 2a O-Specific Polysaccharide-Tetanus Toxoid Conjugates. Annals of the New York Academy of Sciences, 1994, 730, 359-360.	1.8	3
122	Stressful sleep. European Respiratory Journal, 2016, 47, 366-368.	3.1	2
123	A Novel Non-invasive Approach for Measuring Upper Airway Collapsibility in Mice. Frontiers in Neurology, 2018, 9, 985.	1.1	2
124	Management of Obesity and Childhood Obstructive Sleep Apnea: The Dangerous Combination. Obesity Management, 2008, 4, 338-343.	0.2	1
125	Upright posture increases oxyhemoglobin saturation in Peruvian highlanders. Respiratory Physiology and Neurobiology, 2019, 266, 138-143.	0.7	1
126	Metabolic syndrome and sleep apnea: A bidirectional relationship. , 2019, , 169-200.		1

#	Article	IF	Citations
127	Role of Leptinâ€TRPM7 Signaling in Carotid Bodies in the Pathogenesis of Sleepâ€Disordered Breathing in Obesity. FASEB Journal, 2021, 35, .	0.2	1
128	Sleep Apnea, Hypoxia Inducible Factor, and Fatty Liver: More Questions Than Answers?. American Journal of Respiratory Cell and Molecular Biology, 2021, 65, 337-338.	1.4	1
129	Of Mice and Babies: PHOX2B and Obstructive Apneas in Congenital Central Hypoventilation Syndrome. American Journal of Respiratory and Critical Care Medicine, 2021, 204, 1128-1130.	2.5	1
130	Obstructive Sleep Apnea and Metabolic Dysfunction. , 2011, , 1331-1338.		1
131	Metabolic monitoring by the carotid body (873.8). FASEB Journal, 2014, 28, 873.8.	0.2	1
132	D-dimer in Marfan syndrome: effect of obstructive sleep apnea induced blood pressure surges. American Journal of Physiology - Heart and Circulatory Physiology, 2022, 322, H742-H748.	1.5	1
133	Obesityâ€Induced Breathing Variability During Sleep Is Independent of Apneas and Sleep Fragmentation. FASEB Journal, 2022, 36, .	0.2	1
134	0111 Leptin Receptor Blockade Decreased Blood Pressure and Hypoxic Ventilatory Response in an Animal Model of Metabolic Syndrome. Sleep, 2019, 42, A46-A46.	0.6	0
135	0073 Activation of Leptin Receptor Positive Neurons in the Nucleus of The Solitary Tract (NTS) Alleviates Sleep Disordered Breathing in Obese Mice. Sleep, 2019, 42, A30-A31.	0.6	0
136	0126 A Novel Non-invasive Approach for Measuring Upper Airway Collapsibility in Mice. Sleep, 2019, 42, A52-A52.	0.6	0
137	Impaired metabolism in obstructive sleep apnea. , 2021, , .		0
138	0167 Obesity-Induced Breathing Variability During Sleep Is Not Entirely Attributed to Apneas and Sleep Fragmentation. Sleep, 2022, 45, A77-A78.	0.6	0