David D Kline

List of Publications by Year
in descending order

87 papers	2,312 citations	257357 24 h-index	214721 47 g-index
89 all docs	89 docs citations	89 times ranked	1884 citing authors

#	Article	IF	Citations
1	Induction of sensory long-term facilitation in the carotid body by intermittent hypoxia: Implications for recurrent apneas. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 10073-10078.	3.3	395
2	Defective carotid body function and impaired ventilatory responses to chronic hypoxia in mice partially deficient for hypoxia-inducible factor 1Â. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 821-826.	3.3	243
3	Exogenous Brain-Derived Neurotrophic Factor Rescues Synaptic Dysfunction in<i>Mecp2</i>-Null Mice. Journal of Neuroscience, 2010, 30, 5303-5310.	1.7	165
4	Altered respiratory responses to hypoxia in mutant mice deficient in neuronal nitric oxide synthase. Journal of Physiology, 1998, 511, 273-287.	1.3	118
5	Adaptive Depression in Synaptic Transmission in the Nucleus of the Solitary Tract after In Vivo Chronic Intermittent Hypoxia: Evidence for Homeostatic Plasticity. Journal of Neuroscience, 2007, 27, 4663-4673.	1.7	105
6	Dopamine Modulates Synaptic Transmission in the Nucleus of the Solitary Tract. Journal of Neurophysiology, 2002, 88, 2736-2744.	0.9	99
7	Endogenous Brain-Derived Neurotrophic Factor in the Nucleus Tractus Solitarius Tonically Regulates Synaptic and Autonomic Function. Journal of Neuroscience, 2011, 31, 12318-12329.	1.7	67
8	Hypoxia activates nucleus tractus solitarii neurons projecting to the paraventricular nucleus of the hypothalamus. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2012, 302, R1219-R1232.	0.9	67
9	Ventilatory Changes During Intermittent Hypoxia: Importance of Pattern and Duration. High Altitude Medicine and Biology, 2002, 3, 195-204.	0.5	62
10	Blunted respiratory responses to hypoxia in mutant mice deficient in nitric oxide synthase-3. Journal of Applied Physiology, 2000, 88, 1496-1508.	1.2	60
11	The Kv1.1 null mouse, a model of sudden unexpected death in epilepsy (<scp>SUDEP</scp>). Epilepsia, 2014, 55, 1808-1816.	2.6	59
12	Chronic Intermittent Hypdxia Enhances Carotid Body Chemoreceptor Response to Low Oxygen. Advances in Experimental Medicine and Biology, 2001, 499, 33-38.	0.8	57
13	Mutant mice deficient in NOSâ€1 exhibit attenuated longâ€term facilitation and shortâ€term potentiation in breathing. Journal of Physiology, 2002, 539, 309-315.	1.3	54
14	Plasticity in glutamatergic NTS neurotransmission. Respiratory Physiology and Neurobiology, 2008, 164, 105-111.	0.7	52
15	Sensory afferent and hypoxia-mediated activation of nucleus tractus solitarius neurons that project to the rostral ventrolateral medulla. Neuroscience, 2010, 167, 510-527.	1.1	51
16	Hydrogen sulfide augments synaptic neurotransmission in the nucleus of the solitary tract. Journal of Neurophysiology, 2011, 106, 1822-1832.	0.9	48
17	Chronic intermittent hypoxia affects integration of sensory input by neurons in the nucleus tractus solitarii. Respiratory Physiology and Neurobiology, 2010, 174, 29-36.	0.7	40
18	Depressed GABA and glutamate synaptic signaling by 5-HT_{1A} receptors in the nucleus tractus solitarii and their role in cardiorespiratory function. Journal of Neurophysiology, 2014, 111, 2493-2504.	0.9	38

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19	Kv1.1 Deletion Augments the Afferent Hypoxic Chemosensory Pathway and Respiration. Journal of Neuroscience, 2005, 25, 3389-3399.	1.7	37
20	Dopamine Inhibits N-Type Channels in Visceral Afferents to Reduce Synaptic Transmitter Release Under Normoxic and Chronic Intermittent Hypoxic Conditions. Journal of Neurophysiology, 2009, 101, 2270-2278.	0.9	36
21	Acute hypoxia activates neuroendocrine, but not presympathetic, neurons in the paraventricular nucleus of the hypothalamus: differential role of nitric oxide. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2017, 312, R982-R995.	0.9	34
22	Catecholaminergic neurons projecting to the paraventricular nucleus of the hypothalamus are essential for cardiorespiratory adjustments to hypoxia. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2015, 309, R721-R731.	0.9	29
23	Acute systemic hypoxia activates hypothalamic paraventricular nucleus-projecting catecholaminergic neurons in the caudal ventrolateral medulla. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2013, 305, R1112-R1123.	0.9	28
24	Glial EAAT2 regulation of extracellular nTS glutamate critically controls neuronal activity and cardiorespiratory reflexes. Journal of Physiology, 2017, 595, 6045-6063.	1.3	27
25	Peripheral Chemosensitivity in Mutant Mice Deficient in Nitric Oxide Synthase. Advances in Experimental Medicine and Biology, 2002, 475, 571-579.	0.8	25
26	Expression of Group I metabotropic glutamate receptors on phenotypically different cells within the nucleus of the solitary tract in the rat. Neuroscience, 2009, 159, 701-716.	1.1	24
27	Impaired ventilatory acclimatization to hypoxia in mice lacking the immediate early gene fos B. Respiratory Physiology and Neurobiology, 2005, 145, 23-31.	0.7	21
28	Excitatory amino acid transporters tonically restrain nTS synaptic and neuronal activity to modulate cardiorespiratory function. Journal of Neurophysiology, 2016, 115, 1691-1702.	0.9	21
29	H2O2 induces delayed hyperexcitability in nucleus tractus solitarii neurons. Neuroscience, 2014, 262, 53-69.	1.1	19
30	The PVN enhances cardiorespiratory responses to acute hypoxia via input to the nTS. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2019, 317, R818-R833.	0.9	17
31	TRPV1 channels contribute to spontaneous glutamate release in nucleus tractus solitarii following chronic intermittent hypoxia. Journal of Neurophysiology, 2019, 121, 881-892.	0.9	16
32	5-Hydroxytryptamine 2C receptors tonically augment synaptic currents in the nucleus tractus solitarii. Journal of Neurophysiology, 2012, 108, 2292-2305.	0.9	15
33	Role of Nitric Oxide in Short-Term Potentiation and Long-Term Facilitation. Advances in Experimental Medicine and Biology, 2001, 499, 215-219.	0.8	13
34	Age Affects Spontaneous Activity and Depolarizing Afterpotentials in Isolated Gonadotropin-Releasing Hormone Neurons. Endocrinology, 2008, 149, 4938-4947.	1.4	13
35	Hydrogen peroxide inhibits neurons in the paraventricular nucleus of the hypothalamus via potassium channel activation. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2019, 317, R121-R133.	0.9	13
36	Activation of 5-hyrdoxytryptamine 7 receptors within the rat nucleus tractus solitarii modulates synaptic properties. Brain Research, 2016, 1635, 12-26.	1.1	12

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37	H2O2 augments cytosolic calcium in nucleus tractus solitarii neurons via multiple voltage-gated calcium channels. American Journal of Physiology - Cell Physiology, 2017, 312, C651-C662.	2.1	12
38	The role of astrocytes in the nucleus tractus solitarii in maintaining central control of autonomic function. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2021, 320, R418-R424.	0.9	12
39	Kv1.3 channels regulate synaptic transmission in the nucleus of solitary tract. Journal of Neurophysiology, 2011, 105, 2772-2780.	0.9	11
40	Endocannabinoids blunt the augmentation of synaptic transmission by serotonin 2A receptors in the nucleus tractus solitarii (nTS). Brain Research, 2013, 1537, 27-36.	1.1	10
41	Activation of alphaâ€1 adrenergic receptors increases cytosolic calcium in neurones of the paraventricular nucleus of the hypothalamus. Journal of Neuroendocrinology, 2019, 31, e12791.	1.2	10
42	Sustained Hypoxia Alters nTS Glutamatergic Signaling and Expression and Function of Excitatory Amino Acid Transporters. Neuroscience, 2020, 430, 131-140.	1.1	10
43	Loss of excitatory amino acid transporter restraint following chronic intermittent hypoxia contributes to synaptic alterations in nucleus tractus solitarii. Journal of Neurophysiology, 2020, 123, 2122-2135.	0.9	9
44	Hypobaric Intermittent Hypoxia Attenuates Hypoxia-induced Depressor Response. PLoS ONE, 2012, 7, e41656.	1.1	8
45	Astrocytic glutamate transporters reduce the neuronal and physiological influence of metabotropic glutamate receptors in nucleus tractus solitarii. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2020, 318, R545-R564.	0.9	8
46	The SHROB Model of Syndrome X: Effects of Excess Dietary Sucrose. Annals of the New York Academy of Sciences, 1999, 892, 315-318.	1.8	7
47	Unilateral vagotomy alters astrocyte and microglial morphology in the nucleus tractus solitarii of the rat. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2021, 320, R945-R959.	0.9	7
48	Mechanisms Underlying Neuroplasticity in the Nucleus Tractus Solitarii Following Hindlimb Unloading in Rats. Neuroscience, 2020, 449, 214-227.	1.1	7
49	Alpha adrenergic receptor signaling in the hypothalamic paraventricular nucleus is diminished by the chronic intermittent hypoxia model of sleep apnea. Experimental Neurology, 2021, 335, 113517.	2.0	6
50	Gamma-Aminobutyric Acid Transporters in the Nucleus Tractus Solitarii Regulate Inhibitory and Excitatory Synaptic Currents That Influence Cardiorespiratory Function. Frontiers in Physiology, 2021, 12, 821110.	1.3	4
51	Tuning excitability of the hypothalamus via glutamate and potassium channel coupling. Journal of Physiology, 2017, 595, 4583-4584.	1.3	3
52	Exaggerated potassium current reduction by oxytocin in visceral sensory neurons following chronic intermittent hypoxia. Autonomic Neuroscience: Basic and Clinical, 2020, 229, 102735.	1.4	3
53	Cardiovascular deconditioning increases GABA signaling in the nucleus tractus solitarii. Journal of Neurophysiology, 2022, 128, 28-39.	0.9	3
54	Intermittent Hypoxia Alters the Function of Cardiovascular Neurons and Reflex Pathways in the Brainstem. , 2012, , 71-83.		1

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55	Increasing Intensity of Hypoxia Augments Fos Expression in Hypothalamic Paraventricular Nucleus (PVN)â€Projecting Neurons in the Nucleus of the Tractus Solitarius (nTS). FASEB Journal, 2010, 24, 990.12.	0.2	0
56	Contributions of hydrogen sulfide to synaptic neurotransmission in the nucleus of the solitary tract (nTS) in normoxia and following chronic intermittent hypoxia. FASEB Journal, 2010, 24, 624.9.	0.2	0
57	Acute hypoxia (AH) augments Fos expression in hypothalamic paraventricular nucleus (PVN)â€projecting neurons in the caudal ventrolateral medulla (CVLM). FASEB Journal, 2011, 25, 1077.21.	0.2	0
58	CNS Relaxin activates spinally projecting and vasopressin containing cells in the hypothalamic paraventricular nucleus. FASEB Journal, 2011, 25, lb616.	0.2	0
59	Activation of the nucleus of the solitary tract (nTS) due to chemoreflex stimulation with acute hypoxia (AH) is independent of hypoxiaâ€induced changes in arterial blood pressure (ABP). FASEB Journal, 2011, 25, 1076.14.	0.2	0
60	Hydrogen peroxide (H 2 O 2) modulates membrane properties in secondâ€order nucleus tractus solitarii (nTS) neurons. FASEB Journal, 2012, 26, 701.7.	0.2	0
61	Serotonin 2A receptors augment synaptic transmission in the nucleus tractus solitarii (nTS). FASEB Journal, 2012, 26, 702.17.	0.2	0
62	Cardiovascular deconditioning augments baseline breathing as well as peripheral and central chemoreflex responses. FASEB Journal, 2012, 26, 702.14.	0.2	0
63	Colocalization of estrogen receptor Î² (ERÎ²) with spinally projecting and vasopressinergic neurons in the hypothalamic paraventricular nucleus (PVN) during pregnancy. FASEB Journal, 2012, 26, 891.9.	0.2	0
64	Activation of nucleus tractus solitarii (nTS) neurons that project to the rostral ventrolateral medulla (RVLM) or hypothalamic paraventricular nucleus (PVN): Role of acute hypoxia (AH). FASEB Journal, 2012, 26, 702.15.	0.2	0
65	Expression of ROS catabolic enzymes in the medial nucleus tractus solitarii (nTS) of rats and upregulation during acute hypoxia. FASEB Journal, 2012, 26, 702.4.	0.2	0
66	Caudal ventrolateral medulla (CVLM) activation by acute hypoxia (AH) is independent of changes in arterial blood pressure (ABP). FASEB Journal, 2012, 26, 702.6.	0.2	0
67	Nucleus tractus solitarii (nTS) is required for phrenic long term facilitation (pLTF) after acute intermittent hypoxia (AIH). FASEB Journal, 2013, 27, 697.16.	0.2	0
68	Hydrogen sulfide (H 2 S) in nucleus tractus solitarii (nTS) modulates the cardiorespiratory system and its response to hypoxia. FASEB Journal, 2013, 27, 697.21.	0.2	0
69	Role of nucleus tractus solitarii (nTS) hydrogen sulfide (H 2 S) in hindlimb unloaded rats. FASEB Journal, 2013, 27, 697.30.	0.2	0
70	Activation of nucleus tractus solitarii (nTS) neurons that project to the rostral ventrolateral medulla (RVLM) or hypothalamic paraventricular nucleus (PVN): Role of acute hypoxia (AH). FASEB Journal, 2013, 27, 697.29.	0.2	0
71	Catecholaminergic neurons projecting to the paraventricular nucleus (PVN) of the hypothalamus are essential for adjustments to respiratory challenges. FASEB Journal, 2013, 27, 697.20.	0.2	0
72	Chronic intermittent hypoxia (CIH, 3d) attenuates glutathione peroxidase expression (Gpx1) and function in the caudal nucleus tractus solitarii (cnTS). FASEB Journal, 2013, 27, 697.31.	0.2	0

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73	5â€HT 1A â€receptor (5â€HT 1A R) modulate excitatory and inhibitory neuronal activity within the nucleus tractus solitarii (nTS). FASEB Journal, 2013, 27, 697.15.	0.2	0
74	Nucleus tractus solitarii (nTS) reactive oxygen species (ROS) contribute to acute intermittent hypoxia (AIH)â€induced phrenic nerve longâ€term facilitation (pLTF). FASEB Journal, 2013, 27, 697.27.	0.2	0
75	5â€Hydroxytrptamine 7 receptors (5â€HT7R) in the nucleus tractus solitarii (nTS) modulate synaptic transmission.. FASEB Journal, 2013, 27, 697.22.	0.2	0
76	Acute hypoxia (AH) increases Fosâ€IR in nNOS and AVP cells in the paraventricular nucleus of the hypothalamus (PVN). FASEB Journal, 2013, 27, 697.26.	0.2	0
77	Norepinephrine Increases Cytosolic Ca 2+ in Neurons of the Paraventricular Nucleus of the Hypothalamus. FASEB Journal, 2018, 32, 732.13.	0.2	0
78	Excitatory Amino Acid Transporters (EAATs) in nTS Limit Metabotropic Glutamate Receptor (mGluRs) Modulation of Synaptic and Neuronal Activity in Chronic Intermittent Hypoxia. FASEB Journal, 2018, 32, 878.4.	0.2	0
79	Oxytocin Reduction of Nodose Ganglion Neurons Potassium Currents is Enhanced in Chronic Intermittent Hypoxia (CIH). FASEB Journal, 2018, 32, 595.7.	0.2	0
80	Role of Alphaâ€1 Adrenergic Receptors (Î±1AR) and Norepinephrine Transporter in Parvocellular Neurons of the Hypothalamic Paraventricular Nucleus (PVN) After Chronic Intermittent Hypoxia Exposure. FASEB Journal, 2019, 33, 744.5.	0.2	0
81	Excitatory Amino Acid Transporters and Presynaptic Afferent Metabotropic Glutamate Receptors (mGluRs) Limit Synaptic Currents via Control of Presynaptic Calcium and Extracellular Glutamate Kinetics. FASEB Journal, 2019, 33, 743.3.	0.2	0
82	Cardiovascular Deconditioning Induces Changes in the Excitatory Neurotransmission and Active Properties of Nucleus Tractus Solitarii Neurons. FASEB Journal, 2019, 33, 742.7.	0.2	0
83	Norepinephrine Increases Cytosolic Ca 2+ in Neurons of the Paraventricular Nucleus of the Hypothalamus via Multiple Signaling Pathways. FASEB Journal, 2019, 33, 744.2.	0.2	0
84	Expression and Function of Oxytocin Signaling on Nodose Sensory Neuron Potassium Currents after Chronic Intermittent Hypoxia (CIH). FASEB Journal, 2019, 33, 558.1.	0.2	0
85	Cardiovascular Deconditioning Enhances Cardiovascular and Autonomic Response to Arterial Chemoreflex Stimulation. FASEB Journal, 2020, 34, 1-1.	0.2	0
86	Mechanisms underlining excitatory synaptic plasticity in the Nucleus Tractus Solitarii following Cardiovascular Deconditioning. FASEB Journal, 2020, 34, 1-1.	0.2	0
87	Vagotomy Alters Astrocyte Morphology in the Brainstem Nucleus Tractus Solitarii. FASEB Journal, 2020, 34, 1-1.	0.2	0