Denis I Burdakov

List of Publications by Year
in descending order

91 papers	6,414 citations	66234 42 h-index	71532 76 g-index
101 all docs	101 docs citations	101 times ranked	5232 citing authors

#	Article	IF	Citations
1	A genetically encoded sensor for in vivo imaging of orexin neuropeptides. Nature Methods, 2022, 19, 231-241.	9.0	50
2	Rational inattention in mice. Science Advances, 2022, 8, eabj8935.	4.7	10
3	Ingested non-essential amino acids recruit brain orexin cells to suppress eating in mice. Current Biology, 2022, 32, 1812-1821.e4.	1.8	15
4	Hypothalamic deep brain stimulation as a strategy to manage anxiety disorders. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2113518119.	3.3	6
5	Natural VTA activity during NREM sleep influences future exploratory behavior. IScience, 2022, 25, 104396.	1.9	6
6	Projections from the dorsomedial division of the bed nucleus of the stria terminalis to hypothalamic nuclei in the mouse. Journal of Comparative Neurology, 2021, 529, 929-956.	0.9	17
7	Subsecond Ensemble Dynamics of Orexin Neurons Link Sensation and Action. Frontiers of Neurology and Neuroscience, 2021, 45, 52-60.	3.0	4
8	Orexin/Hypocretin and MCH Neurons: Cognitive and Motor Roles Beyond Arousal. Frontiers in Neuroscience, 2021, 15, 639313.	1.4	18
9	Neuropeptides as Primary Mediators of Brain Circuit Connectivity. Frontiers in Neuroscience, 2021, 15, 644313.	1.4	18
10	Orexin neuron activity in mating mice - a pilot study. Neuroanatomy and Behaviour, 2021, 3, e17-e17.	1.5	3
11	Do orexin/hypocretin neurons signal stress or reward?. Peptides, 2021, 145, 170629.	1.2	16
12	Optogenetic activation of striatal D1R and D2R cells differentially engages downstream connected areas beyond the basal ganglia. Cell Reports, 2021, 37, 110161.	2.9	15
13	How orexin signals bias action: Hypothalamic and accumbal circuits. Brain Research, 2020, 1731, 145943.	1.1	19
14	Orexin neurons and inhibitory Agrpâ†’orexin circuits guide spatial exploration in mice. Journal of Physiology, 2020, 598, 4371-4383.	1.3	23
15	Ultra-sparse Connectivity within the Lateral Hypothalamus. Current Biology, 2020, 30, 4063-4070.e2.	1.8	22
16	Control of fear extinction by hypothalamic melanin-concentrating hormoneâ€"expressing neurons. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 22514-22521.	3.3	21
17	The hypothalamus as a primary coordinator of memory updating. Physiology and Behavior, 2020, 223, 112988.	1.0	41
18	Role of spontaneous and sensory orexin network dynamics in rapid locomotion initiation. Progress in Neurobiology, 2020, 187, 101771.	2.8	51

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19	Diet and sleep: is hypothalamus the link?. Current Opinion in Physiology, 2020, 15, 224-229.	0.9	4
20	Fast sensory representations in the lateral hypothalamus and their roles in brain function. Physiology and Behavior, 2020, 222, 112952.	1.0	9
21	Narcolepsy â€" clinical spectrum, aetiopathophysiology, diagnosis and treatment. Nature Reviews Neurology, 2019, 15, 519-539.	4.9	364
22	A Circuit Perspective on State-Dependent Effects of Dopamine Stimulants. Neuron, 2019, 103, 755-756.	3.8	0
23	Hypothalamic Heuristics for Survival. Trends in Endocrinology and Metabolism, 2019, 30, 689-691.	3.1	5
24	Natural hypothalamic circuit dynamics underlying object memorization. Nature Communications, 2019, 10, 2505.	5.8	59
25	Dopamine neuron-derived IGF-1 controls dopamine neuron firing, skill learning, and exploration. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 3817-3826.	3.3	45
26	GABA and glutamate neurons in the VTA regulate sleep and wakefulness. Nature Neuroscience, 2019, 22, 106-119.	7.1	188
27	Reactive and predictive homeostasis: Roles of orexin/hypocretin neurons. Neuropharmacology, 2019, 154, 61-67.	2.0	32
28	Accumbal D2 cells orchestrate innate risk-avoidance according to orexin signals. Nature Neuroscience, 2018, 21, 29-32.	7.1	66
29	Inhibitory Control of Prefrontal Cortex by the Claustrum. Neuron, 2018, 99, 1029-1039.e4.	3.8	121
30	Fast and Slow Oscillations Recruit Molecularly-Distinct Subnetworks of Lateral Hypothalamic Neurons<i>In Situ</i>. ENeuro, 2018, 5, ENEURO.0012-18.2018.	0.9	11
31	Agrp neuron activity is required for alcohol-induced overeating. Nature Communications, 2017, 8, 14014.	5.8	23
32	Gamma oscillations organize top-down signalling to hypothalamus and enable food seeking. Nature, 2017, 542, 232-236.	13.7	102
33	Orexin-driven GAD65 network of the lateral hypothalamus sets physical activity in mice. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 4525-4530.	3.3	73
34	Sleep & metabolism: The multitasking ability of lateral hypothalamic inhibitory circuitries. Frontiers in Neuroendocrinology, 2017, 44, 27-34.	2.5	44
35	Aversive stimuli drive hypothalamus-to-habenula excitation to promote escape behavior. ELife, 2017, 6, .	2.8	110
36	Brain glucose feedback predicts food choice (Commentary on Wakabayashi <i>etÂal</i>.). European Journal of Neuroscience, 2016, 43, 1420-1421.	1.2	2

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37	Inhibitory Interplay between Orexin Neurons and Eating. Current Biology, 2016, 26, 2486-2491.	1.8	118
38	Orexin/Hypocretin and Organizing Principles for a Diversity of Wake-Promoting Neurons in the Brain. Current Topics in Behavioral Neurosciences, 2016, 33, 51-74.	0.8	34
39	Cellular activation of hypothalamic hypocretin/orexin neurons facilitates short-term spatial memory in mice. Neurobiology of Learning and Memory, 2016, 136, 183-188.	1.0	39
40	Awake dynamics and brain-wide direct inputs of hypothalamic MCH and orexin networks. Nature Communications, 2016, 7, 11395.	5.8	152
41	Sweet and Low on Leptin: Hormonal Regulation of Sweet Taste Buds. Diabetes, 2015, 64, 3651-3652.	0.3	7
42	Optogenetic Evidence for Inhibitory Signaling from Orexin to MCH Neurons via Local Microcircuits. Journal of Neuroscience, 2015, 35, 5435-5441.	1.7	113
43	Mechanisms of Gain Control by Voltage-Gated Channels in Intrinsically-Firing Neurons. PLoS ONE, 2015, 10, e0115431.	1.1	8
44	A unifying computational framework for stability and flexibility of arousal. Frontiers in Systems Neuroscience, 2014, 8, 192.	1.2	20
45	Acute Suppressive and Long-Term Phase Modulation Actions of Orexin on the Mammalian Circadian Clock. Journal of Neuroscience, 2014, 34, 3607-3621.	1.7	116
46	5-HT Obesity Medication Efficacy via POMC Activation is Maintained During Aging. Endocrinology, 2014, 155, 3732-3738.	1.4	35
47	Coreleased Orexin and Glutamate Evoke Nonredundant Spike Outputs and Computations in Histamine Neurons. Cell Reports, 2014, 7, 697-704.	2.9	160
48	Lateral hypothalamus as a sensor-regulator in respiratory and metabolic control. Physiology and Behavior, 2013, 121, 117-124.	1.0	97
49	Optogenetic identification of a rapid eye movement sleep modulatory circuit in the hypothalamus. Nature Neuroscience, 2013, 16, 1637-1643.	7.1	359
50	Lateral hypothalamic GAD65 neurons are spontaneously firing and distinct from orexinâ€•and melaninâ€concentrating hormone neurons. Journal of Physiology, 2013, 591, 933-953.	1.3	60
51	5-HT2C Receptor Agonist Anorectic Efficacy Potentiated by 5-HT1B Receptor Agonist Coapplication: An Effect Mediated via Increased Proportion of Pro-Opiomelanocortin Neurons Activated. Journal of Neuroscience, 2013, 33, 9800-9804.	1.7	43
52	Optogenetic Probing of Fast Glutamatergic Transmission from Hypocretin/Orexin to Histamine Neurons<i>In Situ</i>. Journal of Neuroscience, 2012, 32, 12437-12443.	1.7	131
53	Tuning Low-Voltage-Activated A-Current for Silent Gain Modulation. Neural Computation, 2012, 24, 3181-3190.	1.3	5
54	Glutamate and GABA as rapid effectors of hypothalamic â€œpeptidergicâ€•neurons. Frontiers in Behavioral Neuroscience, 2012, 6, 81.	1.0	60

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55	Convergent inputs from electrically and topographically distinct orexin cells to locus coeruleus and ventral tegmental area. European Journal of Neuroscience, 2012, 35, 1426-1432.	1.2	48
56	Leptin Does Not Directly Affect CNS Serotonin Neurons to Influence Appetite. Cell Metabolism, 2011, 13, 584-591.	7.2	67
57	Activation of Central Orexin/Hypocretin Neurons by Dietary Amino Acids. Neuron, 2011, 72, 616-629.	3.8	134
58	Optogenetics: potentials for addiction research. Addiction Biology, 2011, 16, 519-531.	1.4	15
59	Direct and indirect control of orexin/hypocretin neurons by glycine receptors. Journal of Physiology, 2011, 589, 639-651.	1.3	28
60	Dichotomous cellular properties of mouse orexin/hypocretin neurons. Journal of Physiology, 2011, 589, 2767-2779.	1.3	49
61	Orexin neurons as conditional glucosensors: paradoxical regulation of sugar sensing by intracellular fuels. Journal of Physiology, 2011, 589, 5701-5708.	1.3	59
62	Paradoxical function of orexin/hypocretin circuits in a mouse model of Huntington's disease. Neurobiology of Disease, 2011, 42, 438-445.	2.1	45
63	Neuropeptide Y Cells Represent a Distinct Glucose-Sensing Population in the Lateral Hypothalamus. Endocrinology, 2011, 152, 4046-4052.	1.4	35
64	Multiple hypothalamic circuits sense and regulate glucose levels. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2011, 300, R47-R55.	0.9	88
65	Metabolic Influence on the Hypocretin/Orexin Neurons. , 2011, , 211-216.		0
66	Silencing of ventromedial hypothalamic neurons by glucose-stimulated K+ currents. Pflugers Archiv European Journal of Physiology, 2009, 458, 777-783.	1.3	12
67	Dissociation between sensing and metabolism of glucose in sugar sensing neurones. Journal of Physiology, 2009, 587, 41-48.	1.3	92
68	Stimulation of orexin/hypocretin neurones by thyrotropinâ€releasing hormone. Journal of Physiology, 2009, 587, 1179-1186.	1.3	49
69	Deletion of TASK1 and TASK3 channels disrupts intrinsic excitability but does not abolish glucose or pH responses of orexin/hypocretin neurons. European Journal of Neuroscience, 2009, 30, 57-64.	1.2	61
70	Hypothalamic orexins/hypocretins as regulators of breathing. Expert Reviews in Molecular Medicine, 2008, 10, e28.	1.6	74
71	Adaptive sugar sensors in hypothalamic feeding circuits. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 11975-11980.	3.3	107
72	Metabolism-Independent Sugar Sensing in Central Orexin Neurons. Diabetes, 2008, 57, 2569-2576.	0.3	111

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73	Electrical Inhibition of Identified Anorexigenic POMC Neurons by Orexin/Hypocretin. Journal of Neuroscience, 2007, 27, 1529-1533.	1.7	72
74	Control of hypothalamic orexin neurons by acid and CO2. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 10685-10690.	3.3	265
75	K+ channels stimulated by glucose: a new energy-sensing pathway. Pflugers Archiv European Journal of Physiology, 2007, 454, 19-27.	1.3	13
76	Biophysical re-equilibration of Ca2+fluxes as a simple biologically plausible explanation for complex intracellular Ca2+release patterns. FEBS Letters, 2006, 580, 463-468.	1.3	19
77	Tandem-Pore K+ Channels Mediate Inhibition of Orexin Neurons by Glucose. Neuron, 2006, 50, 711-722.	3.8	259
78	Enhanced PIP3 signaling in POMC neurons causes KATP channel activation and leads to diet-sensitive obesity. Journal of Clinical Investigation, 2006, 116, 1886-1901.	3.9	281
79	Intraluminal calcium as a primary regulator of endoplasmic reticulum function. Cell Calcium, 2005, 38, 303-310.	1.1	214
80	Metabolic state signalling through central hypocretin/orexin neurons. Journal of Cellular and Molecular Medicine, 2005, 9, 795-803.	1.6	51
81	Gain Control by Concerted Changes in IA and I H Conductances. Neural Computation, 2005, 17, 991-995.	1.3	29
82	Glucose-sensing neurons of the hypothalamus. Philosophical Transactions of the Royal Society B: Biological Sciences, 2005, 360, 2227-2235.	1.8	230
83	Physiological Changes in Glucose Differentially Modulate the Excitability of Hypothalamic Melanin-Concentrating Hormone and Orexin Neurons In Situ. Journal of Neuroscience, 2005, 25, 2429-2433.	1.7	314
84	Unraveling electrical signaling strategies in hypothalamic feeding circuits. Trends in Endocrinology and Metabolism, 2005, 16, 202-203.	3.1	7
85	Low-voltage-activated A-current controls the firing dynamics of mouse hypothalamic orexin neurons. European Journal of Neuroscience, 2004, 20, 3281-3285.	1.2	31
86	Electrical Signaling in Central Orexin/Hypocretin Circuits: Tuning Arousal and Appetite to Fit the Environment. Neuroscientist, 2004, 10, 286-291.	2.6	27
87	Orexin Excites GABAergic Neurons of the Arcuate Nucleus by Activating the Sodiumâ€"Calcium Exchanger. Journal of Neuroscience, 2003, 23, 4951-4957.	1.7	149
88	Cholecystokinin Tunes Firing of an Electrically Distinct Subset of Arcuate Nucleus Neurons by Activating A-Type Potassium Channels. Journal of Neuroscience, 2002, 22, 6380-6387.	1.7	53
89	Shedding new light on brain metabolism and glial function. Journal of Physiology, 2002, 544, 334-334.	1.3	7
90	Two neuropeptides recruit different messenger pathways to evoke Ca2+ signals in the same cell. Current Biology, 2000, 10, 993-996.	1.8	41

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91	Polarity in intracellular calcium signaling. BioEssays, 1999, 21, 851-860.	1.2	78