

Denis I Burdakov

List of Publications by Year in descending order

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Version: 2024-02-01

91
papers

6,414
citations

66343

42
h-index

71685

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. <i>Nature Methods</i> , 2022, 19, 231-241.	19.0	50
2	Rational inattention in mice. <i>Science Advances</i> , 2022, 8, eabj8935.	10.3	10
3	Ingested non-essential amino acids recruit brain orexin cells to suppress eating in mice. <i>Current Biology</i> , 2022, 32, 1812-1821.e4.	3.9	15
4	Hypothalamic deep brain stimulation as a strategy to manage anxiety disorders. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, e2113518119.	7.1	6
5	Natural VTA activity during NREM sleep influences future exploratory behavior. <i>IScience</i> , 2022, 25, 104396.	4.1	6
6	Projections from the dorsomedial division of the bed nucleus of the stria terminalis to hypothalamic nuclei in the mouse. <i>Journal of Comparative Neurology</i> , 2021, 529, 929-956.	1.6	17
7	Subsecond Ensemble Dynamics of Orexin Neurons Link Sensation and Action. <i>Frontiers of Neurology and Neuroscience</i> , 2021, 45, 52-60.	2.8	4
8	Orexin/Hypocretin and MCH Neurons: Cognitive and Motor Roles Beyond Arousal. <i>Frontiers in Neuroscience</i> , 2021, 15, 639313.	2.8	18
9	Neuropeptides as Primary Mediators of Brain Circuit Connectivity. <i>Frontiers in Neuroscience</i> , 2021, 15, 644313.	2.8	18
10	Orexin neuron activity in mating mice - a pilot study. <i>Neuroanatomy and Behaviour</i> , 2021, 3, e17-e17.	1.5	3
11	Do orexin/hypocretin neurons signal stress or reward?. <i>Peptides</i> , 2021, 145, 170629.	2.4	16
12	Optogenetic activation of striatal D1R and D2R cells differentially engages downstream connected areas beyond the basal ganglia. <i>Cell Reports</i> , 2021, 37, 110161.	6.4	15
13	How orexin signals bias action: Hypothalamic and accumbal circuits. <i>Brain Research</i> , 2020, 1731, 145943.	2.2	19
14	Orexin neurons and inhibitory Agrp ⁺ orexin circuits guide spatial exploration in mice. <i>Journal of Physiology</i> , 2020, 598, 4371-4383.	2.9	23
15	Ultra-sparse Connectivity within the Lateral Hypothalamus. <i>Current Biology</i> , 2020, 30, 4063-4070.e2.	3.9	22
16	Control of fear extinction by hypothalamic melanin-concentrating hormone-expressing neurons. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 22514-22521.	7.1	21
17	The hypothalamus as a primary coordinator of memory updating. <i>Physiology and Behavior</i> , 2020, 223, 112988.	2.1	41
18	Role of spontaneous and sensory orexin network dynamics in rapid locomotion initiation. <i>Progress in Neurobiology</i> , 2020, 187, 101771.	5.7	51

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19	Diet and sleep: is hypothalamus the link?. <i>Current Opinion in Physiology</i> , 2020, 15, 224-229.	1.8	4
20	Fast sensory representations in the lateral hypothalamus and their roles in brain function. <i>Physiology and Behavior</i> , 2020, 222, 112952.	2.1	9
21	Narcolepsy " clinical spectrum, aetiopathophysiology, diagnosis and treatment. <i>Nature Reviews Neurology</i> , 2019, 15, 519-539.	10.1	364
22	A Circuit Perspective on State-Dependent Effects of Dopamine Stimulants. <i>Neuron</i> , 2019, 103, 755-756.	8.1	0
23	Hypothalamic Heuristics for Survival. <i>Trends in Endocrinology and Metabolism</i> , 2019, 30, 689-691.	7.1	5
24	Natural hypothalamic circuit dynamics underlying object memorization. <i>Nature Communications</i> , 2019, 10, 2505.	12.8	59
25	Dopamine neuron-derived IGF-1 controls dopamine neuron firing, skill learning, and exploration. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 3817-3826.	7.1	45
26	GABA and glutamate neurons in the VTA regulate sleep and wakefulness. <i>Nature Neuroscience</i> , 2019, 22, 106-119.	14.8	188
27	Reactive and predictive homeostasis: Roles of orexin/hypocretin neurons. <i>Neuropharmacology</i> , 2019, 154, 61-67.	4.1	32
28	Accumbal D2 cells orchestrate innate risk-avoidance according to orexin signals. <i>Nature Neuroscience</i> , 2018, 21, 29-32.	14.8	66
29	Inhibitory Control of Prefrontal Cortex by the Claustrum. <i>Neuron</i> , 2018, 99, 1029-1039.e4.	8.1	121
30	Fast and Slow Oscillations Recruit Molecularly-Distinct Subnetworks of Lateral Hypothalamic Neurons <i>In Situ</i> . <i>ENeuro</i> , 2018, 5, ENEURO.0012-18.2018.	1.9	11
31	Agrp neuron activity is required for alcohol-induced overeating. <i>Nature Communications</i> , 2017, 8, 14014.	12.8	23
32	Gamma oscillations organize top-down signalling to hypothalamus and enable food seeking. <i>Nature</i> , 2017, 542, 232-236.	27.8	102
33	Orexin-driven GAD65 network of the lateral hypothalamus sets physical activity in mice. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 4525-4530.	7.1	73
34	Sleep & metabolism: The multitasking ability of lateral hypothalamic inhibitory circuitries. <i>Frontiers in Neuroendocrinology</i> , 2017, 44, 27-34.	5.2	44
35	Aversive stimuli drive hypothalamus-to-habenula excitation to promote escape behavior. <i>ELife</i> , 2017, 6, .	6.0	110
36	Brain glucose feedback predicts food choice (Commentary on Wakabayashi <i>et al</i>). <i>European Journal of Neuroscience</i> , 2016, 43, 1420-1421.	2.6	2

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37	Inhibitory Interplay between Orexin Neurons and Eating. <i>Current Biology</i> , 2016, 26, 2486-2491.	3.9	118
38	Orexin/Hypocretin and Organizing Principles for a Diversity of Wake-Promoting Neurons in the Brain. <i>Current Topics in Behavioral Neurosciences</i> , 2016, 33, 51-74.	1.7	34
39	Cellular activation of hypothalamic hypocretin/orexin neurons facilitates short-term spatial memory in mice. <i>Neurobiology of Learning and Memory</i> , 2016, 136, 183-188.	1.9	39
40	Awake dynamics and brain-wide direct inputs of hypothalamic MCH and orexin networks. <i>Nature Communications</i> , 2016, 7, 11395.	12.8	152
41	Sweet and Low on Leptin: Hormonal Regulation of Sweet Taste Buds. <i>Diabetes</i> , 2015, 64, 3651-3652.	0.6	7
42	Optogenetic Evidence for Inhibitory Signaling from Orexin to MCH Neurons via Local Microcircuits. <i>Journal of Neuroscience</i> , 2015, 35, 5435-5441.	3.6	113
43	Mechanisms of Gain Control by Voltage-Gated Channels in Intrinsically-Firing Neurons. <i>PLoS ONE</i> , 2015, 10, e0115431.	2.5	8
44	A unifying computational framework for stability and flexibility of arousal. <i>Frontiers in Systems Neuroscience</i> , 2014, 8, 192.	2.5	20
45	Acute Suppressive and Long-Term Phase Modulation Actions of Orexin on the Mammalian Circadian Clock. <i>Journal of Neuroscience</i> , 2014, 34, 3607-3621.	3.6	116
46	5-HT Obesity Medication Efficacy via POMC Activation is Maintained During Aging. <i>Endocrinology</i> , 2014, 155, 3732-3738.	2.8	35
47	Coreleased Orexin and Glutamate Evoke Nonredundant Spike Outputs and Computations in Histamine Neurons. <i>Cell Reports</i> , 2014, 7, 697-704.	6.4	160
48	Lateral hypothalamus as a sensor-regulator in respiratory and metabolic control. <i>Physiology and Behavior</i> , 2013, 121, 117-124.	2.1	97
49	Optogenetic identification of a rapid eye movement sleep modulatory circuit in the hypothalamus. <i>Nature Neuroscience</i> , 2013, 16, 1637-1643.	14.8	359
50	Lateral hypothalamic GAD65 neurons are spontaneously firing and distinct from orexin and melanin-concentrating hormone neurons. <i>Journal of Physiology</i> , 2013, 591, 933-953.	2.9	60
51	5-HT _{2C} Receptor Agonist Anorectic Efficacy Potentiated by 5-HT _{1B} Receptor Agonist Coapplication: An Effect Mediated via Increased Proportion of Pro-Opiomelanocortin Neurons Activated. <i>Journal of Neuroscience</i> , 2013, 33, 9800-9804.	3.6	43
52	Optogenetic Probing of Fast Glutamatergic Transmission from Hypocretin/Orexin to Histamine Neurons <i>In Situ</i> . <i>Journal of Neuroscience</i> , 2012, 32, 12437-12443.	3.6	131
53	Tuning Low-Voltage-Activated A-Current for Silent Gain Modulation. <i>Neural Computation</i> , 2012, 24, 3181-3190.	2.2	5
54	Glutamate and GABA as rapid effectors of hypothalamic orexinergic neurons. <i>Frontiers in Behavioral Neuroscience</i> , 2012, 6, 81.	2.0	60

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55	Convergent inputs from electrically and topographically distinct orexin cells to locus coeruleus and ventral tegmental area. <i>European Journal of Neuroscience</i> , 2012, 35, 1426-1432.	2.6	48
56	Leptin Does Not Directly Affect CNS Serotonin Neurons to Influence Appetite. <i>Cell Metabolism</i> , 2011, 13, 584-591.	16.2	67
57	Activation of Central Orexin/Hypocretin Neurons by Dietary Amino Acids. <i>Neuron</i> , 2011, 72, 616-629.	8.1	134
58	Optogenetics: potentials for addiction research. <i>Addiction Biology</i> , 2011, 16, 519-531.	2.6	15
59	Direct and indirect control of orexin/hypocretin neurons by glycine receptors. <i>Journal of Physiology</i> , 2011, 589, 639-651.	2.9	28
60	Dichotomous cellular properties of mouse orexin/hypocretin neurons. <i>Journal of Physiology</i> , 2011, 589, 2767-2779.	2.9	49
61	Orexin neurons as conditional glucosensors: paradoxical regulation of sugar sensing by intracellular fuels. <i>Journal of Physiology</i> , 2011, 589, 5701-5708.	2.9	59
62	Paradoxical function of orexin/hypocretin circuits in a mouse model of Huntington's disease. <i>Neurobiology of Disease</i> , 2011, 42, 438-445.	4.4	45
63	Neuropeptide Y Cells Represent a Distinct Glucose-Sensing Population in the Lateral Hypothalamus. <i>Endocrinology</i> , 2011, 152, 4046-4052.	2.8	35
64	Multiple hypothalamic circuits sense and regulate glucose levels. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2011, 300, R47-R55.	1.8	88
65	Metabolic Influence on the Hypocretin/Orexin Neurons. , 2011, , 211-216.		0
66	Silencing of ventromedial hypothalamic neurons by glucose-stimulated K ⁺ currents. <i>Pflügers Archiv European Journal of Physiology</i> , 2009, 458, 777-783.	2.8	12
67	Dissociation between sensing and metabolism of glucose in sugar sensing neurones. <i>Journal of Physiology</i> , 2009, 587, 41-48.	2.9	92
68	Stimulation of orexin/hypocretin neurones by thyrotropin-releasing hormone. <i>Journal of Physiology</i> , 2009, 587, 1179-1186.	2.9	49
69	Deletion of TASK1 and TASK3 channels disrupts intrinsic excitability but does not abolish glucose or pH responses of orexin/hypocretin neurons. <i>European Journal of Neuroscience</i> , 2009, 30, 57-64.	2.6	61
70	Hypothalamic orexins/hypocretins as regulators of breathing. <i>Expert Reviews in Molecular Medicine</i> , 2008, 10, e28.	3.9	74
71	Adaptive sugar sensors in hypothalamic feeding circuits. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 11975-11980.	7.1	107
72	Metabolism-Independent Sugar Sensing in Central Orexin Neurons. <i>Diabetes</i> , 2008, 57, 2569-2576.	0.6	111

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73	Electrical Inhibition of Identified Anorexigenic POMC Neurons by Orexin/Hypocretin. <i>Journal of Neuroscience</i> , 2007, 27, 1529-1533.	3.6	72
74	Control of hypothalamic orexin neurons by acid and CO ₂ . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 10685-10690.	7.1	265
75	K ⁺ channels stimulated by glucose: a new energy-sensing pathway. <i>Pflugers Archiv European Journal of Physiology</i> , 2007, 454, 19-27.	2.8	13
76	Biophysical re-equilibration of Ca ²⁺ fluxes as a simple biologically plausible explanation for complex intracellular Ca ²⁺ release patterns. <i>FEBS Letters</i> , 2006, 580, 463-468.	2.8	19
77	Tandem-Pore K ⁺ Channels Mediate Inhibition of Orexin Neurons by Glucose. <i>Neuron</i> , 2006, 50, 711-722.	8.1	259
78	Enhanced PIP ₃ signaling in POMC neurons causes KATP channel activation and leads to diet-sensitive obesity. <i>Journal of Clinical Investigation</i> , 2006, 116, 1886-1901.	8.2	281
79	Intraluminal calcium as a primary regulator of endoplasmic reticulum function. <i>Cell Calcium</i> , 2005, 38, 303-310.	2.4	214
80	Metabolic state signalling through central hypocretin/orexin neurons. <i>Journal of Cellular and Molecular Medicine</i> , 2005, 9, 795-803.	3.6	51
81	Gain Control by Concerted Changes in IA and IH Conductances. <i>Neural Computation</i> , 2005, 17, 991-995.	2.2	29
82	Glucose-sensing neurons of the hypothalamus. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2005, 360, 2227-2235.	4.0	230
83	Physiological Changes in Glucose Differentially Modulate the Excitability of Hypothalamic Melanin-Concentrating Hormone and Orexin Neurons In Situ. <i>Journal of Neuroscience</i> , 2005, 25, 2429-2433.	3.6	314
84	Unraveling electrical signaling strategies in hypothalamic feeding circuits. <i>Trends in Endocrinology and Metabolism</i> , 2005, 16, 202-203.	7.1	7
85	Low-voltage-activated A-current controls the firing dynamics of mouse hypothalamic orexin neurons. <i>European Journal of Neuroscience</i> , 2004, 20, 3281-3285.	2.6	31
86	Electrical Signaling in Central Orexin/Hypocretin Circuits: Tuning Arousal and Appetite to Fit the Environment. <i>Neuroscientist</i> , 2004, 10, 286-291.	3.5	27
87	Orexin Excites GABAergic Neurons of the Arcuate Nucleus by Activating the Sodium-Calcium Exchanger. <i>Journal of Neuroscience</i> , 2003, 23, 4951-4957.	3.6	149
88	Cholecystokinin Tunes Firing of an Electrically Distinct Subset of Arcuate Nucleus Neurons by Activating A-Type Potassium Channels. <i>Journal of Neuroscience</i> , 2002, 22, 6380-6387.	3.6	53
89	Shedding new light on brain metabolism and glial function. <i>Journal of Physiology</i> , 2002, 544, 334-334.	2.9	7
90	Two neuropeptides recruit different messenger pathways to evoke Ca ²⁺ signals in the same cell. <i>Current Biology</i> , 2000, 10, 993-996.	3.9	41

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91	Polarity in intracellular calcium signaling. BioEssays, 1999, 21, 851-860.	2.5	78