James T Mckenna

List of Publications by Year
in descending order

61 papers	3,464 citations	236925 25 h-index	223800 46 g-index
67 all docs	67 docs citations	67 times ranked	4026 citing authors

#	Article	IF	Citations
1	Control of Sleep and Wakefulness. Physiological Reviews, 2012, 92, 1087-1187.	28.8	1,089
2	Cortically projecting basal forebrain parvalbumin neurons regulate cortical gamma band oscillations. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 3535-3540.	7.1	246
3	Afferent projections to nucleus reuniens of the thalamus. Journal of Comparative Neurology, 2004, 480, 115-142.	1.6	211
4	Hippocampal synaptic plasticity and spatial learning are impaired in a rat model of sleep fragmentation. European Journal of Neuroscience, 2006, 23, 2739-2748.	2.6	185
5	Functions and Mechanisms of Sleep. AIMS Neuroscience, 2016, 3, 67-104.	2.3	153
6	Cholinergic Neurons in the Basal Forebrain Promote Wakefulness by Actions on Neighboring Non-Cholinergic Neurons: An Opto-Dialysis Study. Journal of Neuroscience, 2016, 36, 2057-2067.	3.6	106
7	Sleep fragmentation elevates behavioral, electrographic and neurochemical measures of sleepiness. Neuroscience, 2007, 146, 1462-1473.	2.3	103
8	Turning a Negative into a Positive: Ascending GABAergic Control of Cortical Activation and Arousal. Frontiers in Neurology, 2015, 6, 135.	2.4	82
9	Characterization of GABAergic neurons in rapidâ€eyeâ€movement sleep controlling regions of the brainstem reticular formation in GAD67â€“green fluorescent protein knockâ€in mice. European Journal of Neuroscience, 2008, 27, 352-363.	2.6	81
10	Cholinergic Neurons Excite Cortically Projecting Basal Forebrain GABAergic Neurons. Journal of Neuroscience, 2014, 34, 2832-2844.	3.6	80
11	Collateral projections from the supramammillary nucleus to the medial septum and hippocampus. Synapse, 2000, 38, 281-293.	1.2	79
12	Distribution and intrinsic membrane properties of basal forebrain GABAergic and parvalbumin neurons in the mouse. Journal of Comparative Neurology, 2013, 521, 1225-1250.	1.6	79
13	Experimental Sleep Fragmentation Impairs Attentional Set-Shifting in Rats. Sleep, 2007, 30, 52-60.	1.1	70
14	Differential effect of orexins (hypocretins) on serotonin release in the dorsal and median raphe nuclei of freely behaving rats. Neuroscience, 2006, 141, 1101-1105.	2.3	67
15	Collateral projections from the median raphe nucleus to the medial septum and hippocampus. Brain Research Bulletin, 2001, 54, 619-630.	3.0	63
16	Spatial learning and memory deficits following exposure to 24Âh of sleep fragmentation or intermittent hypoxia in a rat model of obstructive sleep apnea. Brain Research, 2009, 1294, 128-137.	2.2	62
17	Complex receptor mediation of acute ketamine application on in vitro gamma oscillations in mouse prefrontal cortex: modeling gamma band oscillation abnormalities in schizophrenia. Neuroscience, 2011, 199, 51-63.	2.3	57
18	24â€ƒhours of sleep deprivation in the rat increases sleepiness and decreases vigilance: introduction of the ratâ€psychomotor vigilance task. Journal of Sleep Research, 2008, 17, 376-384.	3.2	54

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19	Thalamic Reticular Nucleus Parvalbumin Neurons Regulate Sleep Spindles and Electrophysiological Aspects of Schizophrenia in Mice. Scientific Reports, 2019, 9, 3607.	3.3	46
20	Knockdown of orexin type 1 receptor in rat locus coeruleus increases REM sleep during the dark period. European Journal of Neuroscience, 2010, 32, 1528-1536.	2.6	44
21	Validation of an automated sleep spindle detection method for mouse electroencephalography. Sleep, 2019, 42, .	1.1	40
22	Sleep fragmentation reduces hippocampal CA1 pyramidal cell excitability and response to adenosine. Neuroscience Letters, 2010, 469, 1-5.	2.1	35
23	Basal Forebrain Parvalbumin Neurons Mediate Arousals from Sleep Induced by Hypercarbia or Auditory Stimuli. Current Biology, 2020, 30, 2379-2385.e4.	3.9	35
24	Microdialysis elevation of adenosine in the basal forebrain produces vigilance impairments in the rat psychomotor vigilance task. Sleep, 2008, 31, 1393-8.	1.1	33
25	Another Chapter in the Adenosine Story. Sleep, 2006, 29, 426-428.	1.1	31
26	Animal Models of Narcolepsy. CNS and Neurological Disorders - Drug Targets, 2009, 8, 296-308.	1.4	28
27	Optogenetic manipulation of an ascending arousal system tunes cortical broadband gamma power and reveals functional deficits relevant to schizophrenia. Molecular Psychiatry, 2021, 26, 3461-3475.	7.9	26
28	Effects on serotonin of (â˜')nicotine and dimethylphenylpiperazinium in the dorsal raphe and nucleus accumbens of freely behaving rats. Neuroscience, 2005, 135, 949-958.	2.3	25
29	One week of exposure to intermittent hypoxia impairs attentional set-shifting in rats. Behavioural Brain Research, 2010, 210, 123-126.	2.2	25
30	Assessing sleepiness in the rat: a multiple sleep latencies test compared to polysomnographic measures of sleepiness. Journal of Sleep Research, 2008, 17, 365-375.	3.2	23
31	c-Fos protein expression is increased in cholinergic neurons of the rodent basal forebrain during spontaneous and induced wakefulness. Brain Research Bulletin, 2009, 80, 382-388.	3.0	22
32	Optogenetic stimulation of basal forebrain parvalbumin neurons modulates the cortical topography of auditory steady-state responses. Brain Structure and Function, 2019, 224, 1505-1518.	2.3	22
33	Somatostatin+/nNOS+ neurons are involved in delta electroencephalogram activity and cortical-dependent recognition memory. Sleep, 2019, 42, .	1.1	17
34	GAD67-GFP knock-in mice have normal sleepâ€“wake patterns and sleep homeostasis. NeuroReport, 2010, 21, 216-220.	1.2	15
35	Chronic ramelteon treatment in a mouse model of Alzheimer's disease. Archives Italiennes De Biologie, 2012, 150, 5-14.	0.4	15
36	Microdialysis Elevation of Adenosine in the Basal Forebrain Produces Vigilance Impairments in the Rat Psychomotor Vigilance Task. Sleep, 2008, , .	1.1	14

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37	Knockdown of GABAA alpha3 subunits on thalamic reticular neurons enhances deep sleep in mice. Nature Communications, 2022, 13, 2246.	12.8	14
38	A rodent cage change insomnia model disrupts memory consolidation. Journal of Sleep Research, 2019, 28, e12792.	3.2	13
39	Knockdown of orexin type 2 receptor in the lateral pontomesencephalic tegmentum of rats increases <scp>REM</scp> sleep. European Journal of Neuroscience, 2013, 37, 957-963.	2.6	11
40	The dual orexinergic receptor antagonist DORA-22 improves the sleep disruption and memory impairment produced by a rodent insomnia model. Sleep, 2020, 43, .	1.1	11
41	Intrinsic membrane properties and cholinergic modulation of mouse basal forebrain glutamatergic neurons in vitro. Neuroscience, 2017, 352, 249-261.	2.3	10
42	Characterization of basal forebrain glutamate neurons suggests a role in control of arousal and avoidance behavior. Brain Structure and Function, 2021, 226, 1755-1778.	2.3	10
43	Activation of basal forebrain purinergic P2 receptors promotes wakefulness in mice. Scientific Reports, 2018, 8, 10730.	3.3	8
44	Neurobiology of REM Sleep, NREM Sleep Homeostasis, and Gamma Band Oscillations. , 2017, , 55-77.		7
45	Pharmacology of Sleep: Adenosine. , 2009, , 601-610.		5
46	The Dual Orexin Receptor Antagonist DORA-22 Improves Mild Stress-induced Sleep Disruption During the Natural Sleep Phase of Nocturnal Rats. Neuroscience, 2021, 463, 30-44.	2.3	3
47	Neurochemistry of wakefulness and sleep. , 2012, , 23-42.		2
48	0021 SLEEP DEPRIVATION ACTIVATES NLRP3 INFLAMMASOMES IN NEURONS AND GLIA. Sleep, 2017, 40, A8-A8.	1.1	2
49	0043 INVESTIGATION OF THE DEVELOPMENTAL ORIGIN OF FOREBRAIN GABAERGIC NEURONS INVOLVED IN SLEEP-WAKE CONTROL USING AÂFATE-MAPPING APPROACH. Sleep, 2017, 40, A17-A17.	1.1	2
50	Neuroanatomy and neurobiology of sleep and wakefulness. , 0, , 13-35.		2
51	Neuronal models of REM-sleep control: evolving concepts. , 0, , 285-300.		0
52	Aberrant cortical neuroplasticity in the <scp>OSA</scp> patient (Commentary on Opie et al.). European Journal of Neuroscience, 2013, 37, 1843-1843.	2.6	0
53	0129 LOCAL THALAMIC RETICULAR NUCLEUS INHIBITION OF T-TYPE CALCIUM CHANNELS REDUCES SLEEP SPINDLES IN MICE. Sleep, 2017, 40, A48-A48.	1.1	0
54	0098 BASAL FOREBRAIN PARVALBUMIN NEURONS CONTROL THALAMIC RETICULAR NEURONS: AN OPTOGENETIC STUDY INVESTIGATING SPINDLES AND NREM SLEEP REGULATION. Sleep, 2017, 40, A37-A37.	1.1	0

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55	0099 INFUSION OF AÂPURINERGIC P2 RECEPTOR AGONIST INTO THE BASAL FOREBRAIN BY REVERSE MICRODIALYSIS ATTENUATES HOMEOSTATIC SLEEP REBOUND. Sleep, 2017, 40, A37-A37.	1.1	0
56	0254 INSOMNIA-RELATED SLEEP DISRUPTION IMPAIRS SLEEP-DEPENDENT MEMORY CONSOLIDATION IN THE RAT. Sleep, 2017, 40, A93-A93.	1.1	0
57	0028 GABAA Receptors Of The Thalamic Reticular Nucleus Regulate Sleep Spindles: An In Vivo Investigation By CRISPR-cas9 Genetic Abscission. Sleep, 2018, 41, A12-A12.	1.1	0
58	0094 Hypnotic Effectiveness Of The Dual Orexin Receptor Antagonist DORA-22, Evaluated With A Rodent Cage-Change Model Of Insomnia. Sleep, 2018, 41, A38-A38.	1.1	0
59	0093 Orexin Receptor Antagonism Improves Stress-related Insomnia, â€œNext Dayâ€•Hypersomnia, And Sleep Dependent Memory Consolidation In The Rat. Sleep, 2019, 42, A38-A38.	1.1	0
60	Introduction to basic science. , 2017, , .		0
61	Partnerships in Neuroscience Research Between Small Colleges and Large Institutions: A Case Study. Journal of Undergraduate Neuroscience Education: JUNE: A Publication of FUN, Faculty for Undergraduate Neuroscience, 2018, 16, A159-A167.	0.0	0