Hugh David Piggins

List of Publications by Year
in descending order

99 papers	5,115 citations	94433 37 h-index	95266 68 g-index
103 all docs	103 docs citations	103 times ranked	4011 citing authors

#	Article	IF	Citations
1	The VPAC2 Receptor Is Essential for Circadian Function in the Mouse Suprachiasmatic Nuclei. Cell, 2002, 109, 497-508.	28.9	488
2	Setting Clock Speed in Mammals: The CK1É› tau Mutation in Mice Accelerates Circadian Pacemakers by Selectively Destabilizing PERIOD Proteins. Neuron, 2008, 58, 78-88.	8.1	342
3	Challenging the omnipotence of the suprachiasmatic timekeeper: are circadian oscillators present throughout the mammalian brain?. European Journal of Neuroscience, 2007, 25, 3195-3216.	2.6	309
4	Melanopsin Contributions to Irradiance Coding in the Thalamo-Cortical Visual System. PLoS Biology, 2010, 8, e1000558.	5.6	226
5	Daily Electrical Silencing in the Mammalian Circadian Clock. Science, 2009, 326, 281-284.	12.6	156
6	A riot of rhythms: neuronal and glial circadian oscillators in the mediobasal hypothalamus. Molecular Brain, 2009, 2, 28.	2.6	153
7	Electrophysiology of the suprachiasmatic circadian clock. Progress in Neurobiology, 2007, 82, 229-255.	5.7	130
8	The mouse VPAC2receptor confers suprachiasmatic nuclei cellular rhythmicity and responsiveness to vasoactive intestinal polypeptidein vitro. European Journal of Neuroscience, 2003, 17, 197-204.	2.6	129
9	Vasoactive intestinal polypeptide (VIP) phaseâ€shifts the rat suprachiasmatic nucleus clock <i>in vitro</i>. European Journal of Neuroscience, 2001, 13, 839-843.	2.6	120
10	Distinct roles for GABA across multiple timescales in mammalian circadian timekeeping. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E3911-9.	7.1	120
11	The Circadian Clock in Murine Chondrocytes Regulates Genes Controlling Key Aspects of Cartilage Homeostasis. Arthritis and Rheumatism, 2013, 65, 2334-2345.	6.7	117
12	Acute Suppressive and Long-Term Phase Modulation Actions of Orexin on the Mammalian Circadian Clock. Journal of Neuroscience, 2014, 34, 3607-3621.	3.6	116
13	Distribution of pituitary adenylate cyclase activating polypeptide (PACAP) immunoreactivity in the hypothalamus and extended amygdala of the rat. Journal of Comparative Neurology, 1996, 376, 278-294.	1.6	113
14	Gastrin-Releasing Peptide Promotes Suprachiasmatic Nuclei Cellular Rhythmicity in the Absence of Vasoactive Intestinal Polypeptide-VPAC₂Receptor Signaling. Journal of Neuroscience, 2005, 25, 11155-11164.	3.6	109
15	Circadian and Photic Regulation of Phosphorylation of ERK1/2 and Elk-1 in the Suprachiasmatic Nuclei of the Syrian Hamster. Journal of Neuroscience, 2003, 23, 3085-3093.	3.6	102
16	Circadian and dark-pulse activation of orexin/hypocretin neurons. Molecular Brain, 2008, 1, 19.	2.6	102
17	Gastrin-Releasing Peptide Phase-Shifts Suprachiasmatic Nuclei Neuronal RhythmsIn Vitro. Journal of Neuroscience, 2000, 20, 5496-5502.	3.6	94
18	Aberrant Gating of Photic Input to the Suprachiasmatic Circadian Pacemaker of Mice Lacking the VPAC2 Receptor. Journal of Neuroscience, 2004, 24, 3522-3526.	3.6	94

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19	Multiple hypothalamic cell populations encoding distinct visual information. Journal of Physiology, 2011, 589, 1173-1194.	2.9	85
20	Ultradian corticosterone secretion is maintained in the absence of circadian cues. European Journal of Neuroscience, 2012, 36, 3142-3150.	2.6	80
21	Feedback actions of locomotor activity to the circadian clock. Progress in Brain Research, 2012, 199, 305-336.	1.4	73
22	Orexin A-like immunoreactivity in the hypothalamus and thalamus of the Syrian hamster (Mesocricetus auratus) and Siberian hamster (Phodopus sungorus), with special reference to circadian structures. Brain Research, 2001, 904, 234-244.	2.2	71
23	Metabolic rhythm abnormalities in mice lacking VIP-VPAC₂ signaling. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2008, 294, R344-R351.	1.8	68
24	MAP kinases in the mammalian circadian system - key regulators of clock function. Journal of Neurochemistry, 2004, 90, 769-775.	3.9	62
25	Circadian changes in PACAP type 1 (PAC1) receptor mRNA in the rat suprachiasmatic and supraoptic nuclei. Brain Research, 1998, 813, 218-222.	2.2	59
26	Expression of VIP and/or PACAP receptor mRNA in peptide synthesizing cells within the suprachiasmatic nucleus of the rat and in its efferent target sites. Journal of Comparative Neurology, 2004, 475, 19-35.	1.6	58
27	Intrinsic and extrinsic cues regulate the daily profile of mouse lateral habenula neuronal activity. Journal of Physiology, 2014, 592, 5025-5045.	2.9	57
28	Circadian changes in the expression of vasoactive intestinal peptide 2 receptor mRNA in the rat suprachiasmatic nuclei. Molecular Brain Research, 1998, 54, 108-112.	2.3	55
29	Live imaging of altered <i>period1</i> expression in the suprachiasmatic nuclei of <i>Vipr2</i>^{â^’<i>/</i>â^’} mice¹. Journal of Neurochemistry, 2008, 106, 1646-1657.	3.9	55
30	Circadian VIPergic Neurons of the Suprachiasmatic Nuclei Sculpt the Sleep-Wake Cycle. Neuron, 2020, 108, 486-499.e5.	8.1	55
31	Contributions of the lateral habenula to circadian timekeeping. Pharmacology Biochemistry and Behavior, 2017, 162, 46-54.	2.9	54
32	Human clock genes. Annals of Medicine, 2002, 34, 394-400.	3.8	52
33	Distribution of substance P and neurokinin-1 receptor immunoreactivity in the suprachiasmatic nuclei and intergeniculate leaflet of hamster, mouse, and rat. Journal of Comparative Neurology, 2001, 438, 50-65.	1.6	46
34	A circadian clock in the sinus node mediates day-night rhythms in Hcn4 and heart rate. Heart Rhythm, 2021, 18, 801-810.	0.7	46
35	VIP receptors control excitability of suprachiasmatic nuclei neurones. Pflugers Archiv European Journal of Physiology, 2006, 452, 7-15.	2.8	43
36	Daily variation in the electrophysiological activity of mouse medial habenula neurones. Journal of Physiology, 2014, 592, 587-603.	2.9	42

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37	Vasoactive intestinal polypeptide phase-advances the rat suprachiasmatic nuclei circadian pacemaker in vitro via protein kinase A and mitogen-activated protein kinase. Neuroscience Letters, 2004, 358, 91-94.	2.1	41
38	Causes and Consequences of Hyperexcitation in Central Clock Neurons. PLoS Computational Biology, 2013, 9, e1003196.	3.2	39
39	Phase-shifting effects of pituitary adenylate cyclase activating polypeptide on hamster wheel-running rhythms. Neuroscience Letters, 2001, 305, 25-28.	2.1	38
40	A novel suction electrode recording technique for monitoring circadian rhythms in single and multiunit discharge from brain slices. Journal of Neuroscience Methods, 2006, 156, 173-181.	2.5	34
41	Effects of Microinjections of Substance P Into the Suprachiasmatic Nucleus Region on Hamster Wheel-Running Rhythms. Brain Research Bulletin, 1997, 42, 451-455.	3.0	33
42	Regulation of melatonin-sensitivity and firing-rate rhythms of hamster suprachiasmatic nucleus neurons: constant light effects. Brain Research, 1993, 602, 191-199.	2.2	31
43	Distribution of ionotropic glutamate receptor subunit immunoreactivity in the suprachiasmatic nucleus and intergeniculate leaflet of the hamster. Brain Research, 1997, 756, 215-224.	2.2	30
44	Identification of PAC1 receptor isoform mRNAs by real-time PCR in rat suprachiasmatic nucleus. Molecular Brain Research, 2002, 105, 29-37.	2.3	29
45	Dark pulse suppression of P-ERK and c-Fos in the hamster suprachiasmatic nuclei. European Journal of Neuroscience, 2005, 22, 158-168.	2.6	27
46	Modeling sleep alterations in Parkinson's disease: How close are we toÂvalid translational animal models?. Sleep Medicine Reviews, 2016, 25, 95-111.	8.5	27
47	Timekeeping in the hindbrain: a multi-oscillatory circadian centre in the mouse dorsal vagal complex. Communications Biology, 2020, 3, 225.	4.4	27
48	Effects of ionophoretically applied bombesin-like peptides on hamster suprachiasmatic nucleus neurons in vitro. European Journal of Pharmacology, 1994, 271, 413-419.	3.5	26
49	Electrophysiological Effects of Pressure-Ejected Bombesin-Like Peptides on Hamster Suprachiasmatic Nucleus Neurons in vitro. Journal of Neuroendocrinology, 1993, 5, 575-581.	2.6	25
50	Deletion of the secretory vesicle proteins IAâ€2 and IAâ€2Î² disrupts circadian rhythms of cardiovascular and physical activity. FASEB Journal, 2009, 23, 3226-3232.	0.5	25
51	PACAP Neurons in the Ventromedial Hypothalamic Nucleus Are Glucose Inhibited and Their Selective Activation Induces Hyperglycaemia. Frontiers in Endocrinology, 2018, 9, 632.	3.5	24
52	Ionophoretically applied substance P activates hamster suprachiasmatic nucleus neurons. Brain Research Bulletin, 1995, 37, 475-479.	3.0	23
53	Expression of mt1 melatonin receptor subtype mRNA in the entrained rat suprachiasmatic nucleus: a quantitative RTâ€"PCR study across the diurnal cycle. Molecular Brain Research, 1999, 72, 176-182.	2.3	23
54	Circadian regulation of mouse suprachiasmatic nuclei neuronal states shapes responses to orexin. European Journal of Neuroscience, 2017, 45, 723-732.	2.6	23

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55	Neurotensin phase-shifts the firing rate rhythm of neurons in the rat suprachiasmatic nucleiin vitro. European Journal of Neuroscience, 2002, 16, 339-344.	2.6	22
56	Circadian Biology: Clocks within Clocks. Current Biology, 2005, 15, R455-R457.	3.9	22
57	Circadian Disruptions in the Myshkin Mouse Model of Mania Are Independent of Deficits in Suprachiasmatic Molecular Clock Function. Biological Psychiatry, 2018, 84, 827-837.	1.3	22
58	Timed daily exercise remodels circadian rhythms in mice. Communications Biology, 2021, 4, 761.	4.4	22
59	Neuropeptide Signaling Differentially Affects Phase Maintenance and Rhythm Generation in SCN and Extra-SCN Circadian Oscillators. PLoS ONE, 2011, 6, e18926.	2.5	21
60	Visual responses in the lateral geniculate evoked by Cx36-independent rod pathways. Vision Research, 2011, 51, 280-287.	1.4	21
61	Suppressed cellular oscillations in afterâ€hours mutant mice are associated with enhanced circadian phaseâ€resetting. Journal of Physiology, 2013, 591, 1063-1080.	2.9	21
62	The Kidney Clock Contributes to Timekeeping by the Master Circadian Clock. International Journal of Molecular Sciences, 2019, 20, 2765.	4.1	21
63	Effects of dopamine D1 and D2 receptor agonists and antagonists on bombesin-induced behaviors. European Journal of Pharmacology, 1990, 191, 281-293.	3.5	20
64	Gastrin-releasing peptide induces c-Fos in the hamster suprachiasmatic nucleus. Neuroscience Letters, 2005, 384, 205-210.	2.1	20
65	<i>Neurospora crassa heat shock factor 1</i> Is an Essential Gene; a Second Heat Shock Factor-Like Gene, <i>hsf2</i> , Is Required for Asexual Spore Formation. Eukaryotic Cell, 2008, 7, 1573-1581.	3.4	19
66	Dietary fat and corticosterone levels are contributing factors to meal anticipation. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2016, 310, R711-R723.	1.8	19
67	Sleep homeostasis during daytime food entrainment in mice. Sleep, 2019, 42, .	1.1	19
68	The neural circadian system of mammals. Essays in Biochemistry, 2011, 49, 1-17.	4.7	19
69	Constant light enhances synchrony among circadian clock cells and promotes behavioral rhythms in VPAC2-signaling deficient mice. Scientific Reports, 2015, 5, 14044.	3.3	18
70	Responses to neuropeptide Y in adult hamster suprachiasmatic nucleus neurones in vitro. European Journal of Pharmacology, 1998, 345, 155-162.	3.5	16
71	VPAC2 receptor expression in human normal and neoplastic tissues: evaluation of the novel MAB SP235. Endocrine Connections, 2015, 4, 18-26.	1.9	16
72	Keeping time in the lamina terminalis: Novel oscillator properties of forebrain sensory circumventricular organs. FASEB Journal, 2020, 34, 974-987.	0.5	13

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73	Phasic Neuronal Firing in the Rodent Nucleus of the Solitary Tract ex vivo. Frontiers in Physiology, 2021, 12, 638695.	2.8	13
74	Daily changes in neuronal activities of the dorsal motor nucleus of the vagus under standard and highâ€fat diet. Journal of Physiology, 2022, 600, 733-749.	2.9	13
75	Rhythmic neuronal activities of the rat nucleus of the solitary tract are impaired by highâ€fat diet â€" implications for daily control of satiety. Journal of Physiology, 2022, 600, 751-767.	2.9	13
76	Delayed Cryptochrome Degradation Asymmetrically Alters the Daily Rhythm in Suprachiasmatic Clock Neuron Excitability. Journal of Neuroscience, 2017, 37, 7824-7836.	3.6	12
77	Perforated Multi-Electrode Array Recording in Hypothalamic Brain Slices. Methods in Molecular Biology, 2021, 2130, 263-285.	0.9	11
78	The effects of concurrent D-1 and D-2 dopamine receptor blockade with sch 23390 and eticlopride, on bombesin-induced behaviours. Progress in Neuro-Psychopharmacology and Biological Psychiatry, 1989, 13, 583-594.	4.8	10
79	Short- and long-term behavioral effects of neonatal exposure to bombesin. Behavioral and Neural Biology, 1992, 57, 213-225.	2.2	10
80	Circadian changes of type II adenylyl cyclase mRNA in the rat suprachiasmatic nuclei. Brain Research, 1998, 810, 279-282.	2.2	10
81	Actions of histamine in the suprachiasmatic nucleus of the Syrian hamster. Brain Research, 1998, 783, 1-9.	2.2	9
82	Zooming in on a gene. Nature, 2011, 471, 455-456.	27.8	9
83	Disruption of daily rhythms in gene expression: The importance of being synchronised. BioEssays, 2014, 36, 644-648.	2.5	9
84	Effects of neonatal blockade of bombesin (BN) receptors with [d-Phe6,Î¨Leu13-Cpa14]BN(6â€"14) on adult behavior and sensitivity to BN. Peptides, 1993, 14, 845-848.	2.4	7
85	Circadian Time Redoxed. Science, 2012, 337, 805-806.	12.6	7
86	On the ontogenetic and sequential characteristics of bombesin-induced grooming in the infant rat. Developmental Brain Research, 1992, 67, 247-256.	1.7	6
87	Circadian Influences on the Habenula and Their Potential Contribution to Neuropsychiatric Disorders. Frontiers in Behavioral Neuroscience, 2021, 15, 815700.	2.0	5
88	The Mammalian Neural Circadian System: From Molecules to Behaviour. , 2017, , 257-275.		3
89	Feeding time. ELife, 2015, 4, .	6.0	3
90	Orexin and Circadian Influences in Sleep and Psychiatric Disorders: A Review of Experimental and Computational Modelling Studies. , 2015, , 299-322.		2

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91	Substance P and neurokinin-1 immunoreactivities in the neural circadian system of the Alaskan northern red-backed vole, Clethrionomys rutilus. Peptides, 2006, 27, 2976-2992.	2.4	1
92	Abundance of Degrees of Freedom. , 2008, , 3-3.		1
93	Stabilizing daily clock proteins. Biochemical Journal, 2006, 399, e1-2.	3.7	0
94	Biological clocks and endocrine function in vertebrates and invertebrates. General and Comparative Endocrinology, 2007, 152, 142-143.	1.8	0
95	Quantifying the visual information sourced from melanopsin photoreceptors in mouse LGN field responses. BMC Neuroscience, 2011, 12, .	1.9	0
96	Identifying spatial and temporal organization in the circadian clock (<scp>C</scp>ommentary on) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	2.6	0
97	Editorial overview: Circadian rhythms. Current Opinion in Physiology, 2018, 5, iii-v.	1.8	0
98	Circadian and Dark-Pulse Activation of Orexin/Hypocretin Neurons. , 2014, , 159-187.		0
99	32â€…Sleep quality, mental health, and circadian rhythms during COVID lockdown â€“ results from the SleepQuest study. , 2021, , .		0