Edgar E GarcÃ-a-Rill

List of Publications by Year
in descending order

145 papers	3,457 citations	136950 32 h-index	189892 50 g-index
156 all docs	156 docs citations	156 times ranked	2954 citing authors

#	Article	IF	Citations
1	Pedunculopontine Nucleus Region Deep Brain Stimulation in Parkinson Disease: Surgical Anatomy and Terminology. Stereotactic and Functional Neurosurgery, 2016, 94, 298-306.	1.5	452
2	Electrical Coupling: Novel Mechanism for Sleep-Wake Control. Sleep, 2007, 30, 1405-1414.	1.1	104
3	The brain stem reticular formation in schizophrenia. Psychiatry Research - Neuroimaging, 1991, 40, 31-48.	1.8	101
4	The Developmental Decrease in REM Sleep: The Role of Transmitters and Electrical Coupling. Sleep, 2008, 31, 673-690.	1.1	88
5	Mechanism behind gamma band activity in the pedunculopontine nucleus. European Journal of Neuroscience, 2011, 34, 404-415.	2.6	86
6	HLA Class II genes associated with REM sleep behavior disorder. Annals of Neurology, 1996, 39, 261-263.	5.3	82
7	Coherence and frequency in the reticular activating system (RAS). Sleep Medicine Reviews, 2013, 17, 227-238.	8.5	78
8	Decreased habituation of midlatency auditory evoked responses in parkinson's disease. Movement Disorders, 1997, 12, 655-664.	3.9	77
9	Modafinil Abrogates Methamphetamine-Induced Neuroinflammation and Apoptotic Effects in the Mouse Striatum. PLoS ONE, 2012, 7, e46599.	2.5	73
10	Effects of fetal spinal cord tissue transplants and cycling exercise on the soleus muscle in spinalized rats. , 1999, 22, 846-856.		72
11	A case of REM sleep behavior disorder with autopsy-confirmed alzheimer's disease: postmortem brain stem histochemical analyses. Biological Psychiatry, 1996, 40, 422-425.	1.3	71
12	Combat veterans with posttraumatic stress disorder exhibit decreased habituation of the P1 midlatency auditory evoked potential. Life Sciences, 1997, 61, 1421-1434.	4.3	71
13	Pedunculopontine Nucleus Region Deep Brain Stimulation in Parkinson Disease: Surgical Techniques, Side Effects, and Postoperative Imaging. Stereotactic and Functional Neurosurgery, 2016, 94, 307-319.	1.5	54
14	The midlatency auditory evoked potential P50 is abnormal in Huntington's disease. Journal of the Neurological Sciences, 2003, 212, 1-5.	0.6	53
15	Modafinil improves methamphetamine-induced object recognition deficits and restores prefrontal cortex ERK signaling in mice. Neuropharmacology, 2014, 87, 188-197.	4.1	53
16	Cholinergic Modulation of Fast Inhibitory and Excitatory Transmission to Pedunculopontine Thalamic Projecting Neurons. Journal of Neurophysiology, 2010, 103, 2417-2432.	1.8	52
17	Evidence for Electrical Coupling in the SubCoeruleus (SubC) Nucleus. Journal of Neurophysiology, 2007, 97, 3142-3147.	1.8	51
18	The physiology of the pedunculopontine nucleus: implications for deep brain stimulation. Journal of Neural Transmission, 2015, 122, 225-235.	2.8	51

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19	Use of a Motorized Bicycle Exercise Trainer to Normalize Frequency-Dependent Habituation of the H-reflex in Spinal Cord Injury. Journal of Spinal Cord Medicine, 2005, 28, 241-245.	1.4	49
20	Sensory gating of the P13 midlatency auditory evoked potential and the startle response in the rat. Brain Research, 1999, 822, 60-71.	2.2	47
21	Modafinil Increases Arousal Determined by P13 Potential Amplitude: An Effect Blocked by Gap Junction Antagonists. Sleep, 2008, 31, 1647-1654.	1.1	46
22	Gamma band activity in the RAS-intracellular mechanisms. Experimental Brain Research, 2014, 232, 1509-1522.	1.5	46
23	Arousal mechanisms related to posture and locomotion: 2. Ascending modulation. Progress in Brain Research, 2004, 143, 291-298.	1.4	44
24	Spatiotemporal properties of high-speed calcium oscillations in the pedunculopontine nucleus. Journal of Applied Physiology, 2013, 115, 1402-1414.	2.5	44
25	The <i>P1: </i>Insights into Attention and Arousal. Pediatric Neurosurgery, 1994, 20, 57-62.	0.7	41
26	Magnetic sources of the M50 response are localized to frontal cortex. Clinical Neurophysiology, 2008, 119, 388-398.	1.5	39
27	Repeated methamphetamine and modafinil induce differential cognitive effects and specific histone acetylation and DNA methylation profiles in the mouse medial prefrontal cortex. Progress in Neuro-Psychopharmacology and Biological Psychiatry, 2018, 82, 1-11.	4.8	39
28	Implications of gamma band activity in the pedunculopontine nucleus. Journal of Neural Transmission, 2016, 123, 655-665.	2.8	37
29	Gamma band activity in the developing parafascicular nucleus. Journal of Neurophysiology, 2012, 107, 772-784.	1.8	36
30	High-threshold Ca²⁺channels behind gamma band activity in the pedunculopontine nucleus (PPN). Physiological Reports, 2015, 3, e12431.	1.7	36
31	Gamma Band Activity in the Reticular Activating System. Frontiers in Neurology, 2012, 3, 6.	2.4	34
32	The pedunculopontine tegmental nucleus: from basic neuroscience to neurosurgical applications. Journal of Neural Transmission, 2011, 118, 1397-1407.	2.8	33
33	Increased foot strike variability in Parkinson's disease patients with freezing of gait. Parkinsonism and Related Disorders, 2018, 53, 58-63.	2.2	33
34	Pedunculopontine Nucleus Gamma Band Activity-Preconscious Awareness, Waking, and REM Sleep. Frontiers in Neurology, 2014, 5, 210.	2.4	32
35	Modulation of gamma oscillations in the pedunculopontine nucleus by neuronal calcium sensor protein-1: relevance to schizophrenia and bipolar disorder. Journal of Neurophysiology, 2015, 113, 709-719.	1.8	31
36	Locus coeruleus involvement in the effects of immobilization stress on the P13 midlatency auditory evoked potential in the rat. Progress in Neuro-Psychopharmacology and Biological Psychiatry, 2000, 24, 1177-1201.	4.8	30

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37	Bias in magnitude estimation following left hemisphere injury. Neuropsychologia, 2006, 44, 1406-1412.	1.6	30
38	Topographical organization of visual input to precruciate cortex of cat. Brain Research, 1973, 56, 151-163.	2.2	29
39	Modulation of GABA release from the thalamic reticular nucleus by cocaine and caffeine: role of serotonin receptors. Journal of Neurochemistry, 2016, 136, 526-535.	3.9	29
40	Arousal and attention deficits in patients with tinnitus. International Tinnitus Journal, 2006, 12, 9-16.	0.2	29
41	Methamphetamine blunts Ca²⁺currents and excitatory synaptic transmission through D1/5 receptor-mediated mechanisms in the mouse medial prefrontal cortex. Addiction Biology, 2016, 21, 589-602.	2.6	28
42	Connections of the mesencephalic locomotor region (MLR) III. Intracellular recordings. Brain Research Bulletin, 1983, 10, 73-81.	3.0	27
43	Synaptic Evoked Potentials from Regenerating Dorsal Root Axons within Fetal Spinal Cord Tissue Transplants. Experimental Neurology, 1996, 139, 278-290.	4.1	27
44	Cholinergic Modulation of GABAergic and Glutamatergic Transmission in the Dorsal Subcoeruleus: Mechanisms for REM Sleep Control. Sleep, 2009, 32, 1135-1147.	1.1	26
45	Muscarinic Modulation of High Frequency Oscillations in Pedunculopontine Neurons. Frontiers in Neurology, 2013, 4, 176.	2.4	26
46	The effects of single-dose injections of modafinil and methamphetamine on epigenetic and functional markers in the mouse medial prefrontal cortex: potential role of dopamine receptors. Progress in Neuro-Psychopharmacology and Biological Psychiatry, 2019, 88, 222-234.	4.8	26
47	Serotonergic modulation of the P13 midlatency auditory evoked potential in the rat. Brain Research Bulletin, 2000, 51, 387-391.	3.0	25
48	Differential effects of methylphenidate and cocaine on <scp>GABA</scp> transmission in sensory thalamic nuclei. Journal of Neurochemistry, 2013, 124, 602-612.	3.9	25
49	Arousal mechanisms related to posture and locomotion: 1. Descending modulation. Progress in Brain Research, 2004, 143, 283-90.	1.4	25
50	Developmental changes in the effects of serotonin on neurons in the region of the pedunculopontine nucleus. Developmental Brain Research, 2003, 140, 57-66.	1.7	24
51	Smoking during pregnancy: Postnatal effects on arousal and attentional brain systems. NeuroToxicology, 2007, 28, 915-923.	3.0	24
52	Commentary: The pedunculopontine nucleus: clinical experience, basic questions and future directions. Journal of Neural Transmission, 2011, 118, 1391-1396.	2.8	23
53	Muscarinic and nicotinic responses in the developing pedunculopontine nucleus (PPN). Brain Research, 2007, 1129, 147-155.	2.2	21
54	Long-term deficits of preterm birth: Evidence for arousal and attentional disturbances. Clinical Neurophysiology, 2008, 119, 1281-1291.	1.5	21

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55	Novel mechanism for hyperreflexia and spasticity. Progress in Brain Research, 2011, 188, 167-180.	1.4	21
56	Intracellular mechanisms modulating gamma band activity in the pedunculopontine nucleus (PPN). Physiological Reports, 2016, 4, e12787.	1.7	21
57	Nicotine suppresses the P13 auditory evoked potential by acting on the pedunculopontine nucleus in the rat. Experimental Brain Research, 2005, 164, 109-119.	1.5	20
58	Visualization of fast calcium oscillations in the parafascicular nucleus. Pflugers Archiv European Journal of Physiology, 2013, 465, 1327-1340.	2.8	20
59	Impaired stepâ€length setting prior to turning in Parkinson's disease patients with freezing of gait. Movement Disorders, 2018, 33, 1823-1825.	3.9	20
60	Cholinergic modulation of the sleep state-dependent P13 midlatency auditory evoked potential in the rat. Brain Research, 2000, 884, 196-200.	2.2	19
61	The effects of passive exercise therapy initiated prior to or after the development of hyperreflexia following spinal transection. Experimental Neurology, 2008, 213, 405-409.	4.1	19
62	Wind-up of stretch reflexes as a measure of spasticity in chronic spinalized rats: The effects of passive exercise and modafinil. Experimental Neurology, 2011, 227, 104-109.	4.1	19
63	The use of three-dimensional printing to produce in vitro slice chambers. Journal of Neuroscience Methods, 2014, 238, 82-87.	2.5	19
64	Pedunculopontine arousal system physiology â€" Implications for insomnia. Sleep Science, 2015, 8, 92-99.	1.0	19
65	Psychostimulant-Induced Testicular Toxicity in Mice: Evidence of Cocaine and Caffeine Effects on the Local Dopaminergic System. PLoS ONE, 2015, 10, e0142713.	2.5	18
66	Combined Effects of Simultaneous Exposure to Caffeine and Cocaine in the Mouse Striatum. Neurotoxicity Research, 2016, 29, 525-538.	2.7	17
67	Cholinergic Responses and Intrinsic Membrane Properties of Developing Thalamic Parafascicular Neurons. Journal of Neurophysiology, 2009, 102, 774-785.	1.8	15
68	Cell Type-specific Intrinsic Perithreshold Oscillations in Hippocampal GABAergic Interneurons. Neuroscience, 2018, 376, 80-93.	2.3	15
69	Bottom-up gamma maintenance in various disorders. Neurobiology of Disease, 2019, 128, 31-39.	4.4	15
70	HDAC superfamily promoters acetylation is differentially regulated by modafinil and methamphetamine in the mouse medial prefrontal cortex. Addiction Biology, 2020, 25, e12737.	2.6	15
71	Pedunculopontine arousal system physiology â€" Deep brain stimulation (DBS). Sleep Science, 2015, 8, 153-161.	1.0	14
72	Class II histone deacetylases require P/Q-type Ca2+ channels and CaMKII to maintain gamma oscillations in the pedunculopontine nucleus. Scientific Reports, 2018, 8, 13156.	3.3	14

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73	Alpha-2 adrenergic regulation of pedunculopontine nucleus neurons during development. Neuroscience, 2006, 141, 769-779.	2.3	13
74	l-Dopa effect on frequency-dependent depression of the H-reflex in adult rats with complete spinal cord transection. Brain Research Bulletin, 2010, 83, 262-265.	3.0	13
75	The Critical Role of Intrinsic Membrane Oscillations. NeuroSignals, 2018, 26, 66-76.	0.9	13
76	Improvement in arousal, visual neglect, and perception of stimulus intensity following cold pressor stimulation. Neurocase, 2012, 18, 115-122.	0.6	12
77	Differential Effects of Environment-Induced Changes in Body Temperature on Modafinilâ€™s Actions Against Methamphetamine-Induced Striatal Toxicity in Mice. Neurotoxicity Research, 2015, 27, 71-83.	2.7	12
78	Arousal and drug abuse. Behavioural Brain Research, 2017, 333, 276-281.	2.2	12
79	Local and Relayed Effects of Deep Brain Stimulation of the Pedunculopontine Nucleus. Brain Sciences, 2019, 9, 64.	2.3	12
80	Group I metabotropic glutamate receptors generate two types of intrinsic membrane oscillations in hippocampal oriens/alveus interneurons. Neuropharmacology, 2018, 139, 150-162.	4.1	11
81	The Basal Ganglia and the Mesencephalic Locomotor Region. , 1986, , 77-103.		11
82	The sleep state-dependent midlatency auditory evoked P50 potential in various disorders. Thalamus & Related Systems, 2002, 2, 9-19.	0.5	9
83	Effects of leptin on pedunculopontine nucleus (PPN) neurons. Journal of Neural Transmission, 2013, 120, 1027-1038.	2.8	9
84	Role of Gâ€proteins in the effects of leptin on pedunculopontine nucleus neurons. Journal of Neurochemistry, 2013, 126, 705-714.	3.9	9
85	Lithium decreases the effects of neuronal calcium sensor protein 1 in pedunculopontine neurons. Physiological Reports, 2016, 4, e12740.	1.7	9
86	Responses of developing pedunculopontine neurons to glutamate receptor agonists. Journal of Neurophysiology, 2011, 105, 1918-1931.	1.8	8
87	Pedunculopontine Gamma Band Activity and Development. Brain Sciences, 2015, 5, 546-567.	2.3	8
88	Potentiating Effect of Eszopiclone on GABAA Receptor-Mediated Responses in Pedunculopontine Neurons. Sleep, 2009, 32, 879-887.	1.1	7
89	Pedunculopontine arousal system physiologyâ€"Effects of psychostimulant abuse. Sleep Science, 2015, 8, 162-168.	1.0	7
90	Pedunculopontine arousal system physiologyâ€"Implications for schizophrenia. Sleep Science, 2015, 8, 82-91.	1.0	7

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91	Progress in deep brain stimulation of the pedunculopontine nucleus and other structures: implications for motor and non-motor disorders. Journal of Neural Transmission, 2016, 123, 653-654.	2.8	7
92	Role of Calcium Channels in Bipolar Disorder. Current Psychopharmacology, 2018, 6, 122-135.	0.3	7
93	Bottomâ€up gamma and bipolar disorder, clinical and neuroepigenetic implications. Bipolar Disorders, 2019, 21, 108-116.	1.9	7
94	Propofol suppresses the sleep state-dependent P13 midlatency auditory evoked potential in the rat. Brain Research Bulletin, 2003, 61, 189-196.	3.0	6
95	Developmental Changes in Glutamatergic Fast Synaptic Neurotransmission in the Dorsal Subcoeruleus Nucleus. Sleep, 2012, 35, 407-417.	1.1	6
96	Proteomic measures of gamma oscillations. Heliyon, 2019, 5, e02265.	3.2	6
97	GABAergic modulation of developing pedunculopontine nucleus. NeuroReport, 2007, 18, 249-253.	1.2	5
98	Interaction between neuronal calcium sensor protein 1 and lithium in pedunculopontine neurons. Physiological Reports, 2017, 5, e13246.	1.7	5
99	Neuroepigenetics of arousal: Gamma oscillations in the pedunculopontine nucleus. Journal of Neuroscience Research, 2019, 97, 1515-1520.	2.9	5
100	Differential effects of HDAC inhibitors on PPN oscillatory activity in vivo. Neuropharmacology, 2020, 165, 107922.	4.1	5
101	Genetic Predictions of Future Dangerousness: Is there a Blueprint for Violence?. , 2009, , 389-437.		5
102	Effects of rotation on the sleep state-dependent midlatency auditory evoked P50 potential in the human. Journal of Vestibular Research: Equilibrium and Orientation, 2002, 12, 205-9.	2.0	5
103	Modulation of the Sleep Stateâ€"Dependent P50 Midlatency Auditory-Evoked Potential by Electric Stimulation of Acupuncture Points. Archives of Physical Medicine and Rehabilitation, 2005, 86, 2018-2026.	0.9	4
104	The 10Hz Fulcrum. , 2015, , 157-170.		4
105	Leptin alters somatosensory thalamic networks by decreasing gaba release from reticular thalamic nucleus and action potential frequency at ventrobasal neurons. Brain Structure and Function, 2018, 223, 2499-2514.	2.3	4
106	Effects of rotation on the sleep state-dependent midlatency auditory evoked P50 potential in the human. Journal of Vestibular Research: Equilibrium and Orientation, 2003, 12, 205-209.	2.0	4
107	Effects of electrical stimulation on acetylcholine synthesis in cat caudate nucleus. Brain Research Bulletin, 1983, 10, 437-440.	3.0	3
108	The sleep state-dependent P50 auditory evoked potential in neuropsychiatric diseases. International Congress Series, 2002, 1232, 813-825.	0.2	3

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109	Recording Gamma Band Oscillations in Pedunculopontine Nucleus Neurons. Journal of Visualized Experiments, 2016, , .	0.3	3
110	Autism and arousal. , 2019, , 83-114.		3
111	Arousal and movement disorders. , 2019, , 179-193.		3
112	The critical role of persistent sodium current in hippocampal gamma oscillations. Neuropharmacology, 2020, 162, 107787.	4.1	3
113	Gamma oscillations in the pedunculopontine nucleus are regulated by F-actin: neuroepigenetic implications. American Journal of Physiology - Cell Physiology, 2020, 318, C282-C288.	4.6	3
114	Cold pressor stimulation diminishes P50 amplitude in normal subjects. Acta Neurobiologiae Experimentalis, 2011, 71, 348-58.	0.7	3
115	Novel Mechanism for Sleep-Wake Control: Electrical Coupling. , 2008, 14, 8-10.		3
116	Governing Principles of Brain Activity. , 2015, , 1-16.		2
117	Effects of Glutamate Receptor Agonists on the P13 Auditory Evoked Potential and Startle Response in the Rat. Frontiers in Neurology, 2011, 2, 3.	2.4	1
118	Descending Projections of the RAS. , 2015, , 129-156.		1
119	Gamma Band Activity. , 2015, , 171-207.		1
120	Concerns regarding Baksa B, Kovacs A, Bayasgalan T, Szentesi P, Koseghy A, Szucs P, Balazs P. Characterization of functional subgroups among genetically identified cholinergic neurons in the pedunculopontine nucleus. Cell Molec. Life Sci. 2019-04-02. Cellular and Molecular Life Sciences, 2019, 76, 4581-4582.	5.4	1
121	Schizophrenia and arousal. , 2019, , 43-54.		1
122	Posttraumatic stress and anxiety, the role of arousal. , 2019, , 67-81.		1
123	Arousal and the Alzheimer disease. , 2019, , 131-141.		1
124	Neuroepigenetics of arousal and the formulation of the self. , 2019, , 221-233.		1
125	Neuropharmacology of Sleep and Wakefulness. , 2005, , 63-71.		0
126	Oocyte triplet pairing for electrophysiological investigation of gap junctional coupling. Journal of Neuroscience Methods, 2010, 188, 280-286.	2.5	0

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127	Neural Mechanisms of Sleep and Circadian Rhythms. , 2012, , 59-71.		0
128	Other Regions Modulating Waking. , 2015, , 35-47.		0
129	Wiring Diagram of the RAS. , 2015, , 49-80.		0
130	Development and the RAS. , 2015, , 81-105.		0
131	Ascending Projections of the RAS. , 2015, , 107-128.		0
132	Neurological Disorders and the RAS. , 2015, , 255-276.		0
133	Psychiatric Disorders and the RAS. , 2015, , 227-254.		0
134	Preconscious Awareness. , 2015, , 209-226.		0
135	Drug Abuse and the RAS. , 2015, , 277-289.		0
136	Bipolar disorder, depression, and arousal. , 2019, , 55-65.		0
137	Physiology of arousal. , 2019, , 25-42.		0
138	Physiological Mechanisms for the Control of Waking. , 2019, , 27-43.		0
139	Arousal in REM sleep behavior disorder and narcolepsy. , 2019, , 161-177.		0
140	My years at UCLA. Journal of Neuroscience Research, 2019, 97, 1749-1749.	2.9	0
141	Translational Research on Spinal Cord Injury. , 0, , 97-108.		0
142	Implications for the Future. , 0, , 135-143.		0
143	Mentoring in Translational Neuroscience. , 0, , 15-28.		0
144	Physiological Substrates of RBD Subtypes. , 2019, , 173-186.		0

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145	Deep brain stimulation for understanding the sleep-wake phenomena. , 2022, , 101-110.		0