

Angel Nuñez

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6230182/publications.pdf>

Version: 2024-02-01

107
papers

8,990
citations

109264

35
h-index

42364

92
g-index

118
all docs

118
docs citations

118
times ranked

7524
citing authors

#	ARTICLE	IF	CITATIONS
1	A novel slow (1 Hz) oscillation of neocortical neurons in vivo: depolarizing and hyperpolarizing components. <i>Journal of Neuroscience</i> , 1993, 13, 3252-3265.	1.7	1,705
2	Intracellular analysis of relations between the slow (1 Hz) neocortical oscillation and other sleep rhythms of the electroencephalogram. <i>Journal of Neuroscience</i> , 1993, 13, 3266-3283.	1.7	846
3	The slow (1 Hz) oscillation in reticular thalamic and thalamocortical neurons: scenario of sleep rhythm generation in interacting thalamic and neocortical networks. <i>Journal of Neuroscience</i> , 1993, 13, 3284-3299.	1.7	788
4	Circulating Insulin-Like Growth Factor I Mediates Effects of Exercise on the Brain. <i>Journal of Neuroscience</i> , 2000, 20, 2926-2933.	1.7	645
5	Network modulation of a slow intrinsic oscillation of cat thalamocortical neurons implicated in sleep delta waves: cortically induced synchronization and brainstem cholinergic suppression. <i>Journal of Neuroscience</i> , 1991, 11, 3200-3217.	1.7	438
6	Astrocytes Mediate In Vivo Cholinergic-Induced Synaptic Plasticity. <i>PLoS Biology</i> , 2012, 10, e1001259.	2.6	332
7	Cholinergic and noradrenergic modulation of the slow (approximately 0.3 Hz) oscillation in neocortical cells. <i>Journal of Neurophysiology</i> , 1993, 70, 1385-1400.	0.9	277
8	Neuronal Activity Drives Localized Blood-Brain-Barrier Transport of Serum Insulin-like Growth Factor-I into the CNS. <i>Neuron</i> , 2010, 67, 834-846.	3.8	265
9	Electrophysiology of a slow (0.5-4 Hz) intrinsic oscillation of cat thalamocortical neurons in vivo.. <i>Journal of Physiology</i> , 1992, 447, 215-234.	1.3	215
10	Central actions of liver-derived insulin-like growth factor I underlying its pro-cognitive effects. <i>Molecular Psychiatry</i> , 2007, 12, 1118-1128.	4.1	178
11	Unit activity of rat basal forebrain neurons: Relationship to cortical activity. <i>Neuroscience</i> , 1996, 72, 757-766.	1.1	166
12	NRF2 deficiency replicates transcriptomic changes in Alzheimer's patients and worsens APP and TAU pathology. <i>Redox Biology</i> , 2017, 13, 444-451.	3.9	161
13	Voltage-dependent fast (20-40 Hz) oscillations in long-axoned neocortical neurons. <i>Neuroscience</i> , 1992, 51, 7-10.	1.1	143
14	Cholinergic-Mediated IP ₃ -Receptor Activation Induces Long-Lasting Synaptic Enhancement in CA1 Pyramidal Neurons. <i>Journal of Neuroscience</i> , 2008, 28, 1469-1478.	1.7	131
15	Intracellular evidence for incompatibility between spindle and delta oscillations in thalamocortical neurons of cat. <i>Neuroscience</i> , 1992, 48, 75-85.	1.1	117
16	Electrophysiology of cat association cortical cells in vivo: intrinsic properties and synaptic responses. <i>Journal of Neurophysiology</i> , 1993, 70, 418-430.	0.9	111
17	Modulation of hippocampal theta oscillations and spatial memory by relaxin-3 neurons of the nucleus incertus. <i>Learning and Memory</i> , 2009, 16, 730-742.	0.5	109
18	Electrophysiological evidence for the existence of a posterior cortical-prefrontal-basal forebrain circuitry in modulating sensory responses in visual and somatosensory rat cortical areas. <i>Neuroscience</i> , 2003, 119, 597-609.	1.1	108

#	ARTICLE	IF	CITATIONS
19	Brain Repair and Neuroprotection by Serum Insulin-Like Growth Factor I. <i>Molecular Neurobiology</i> , 2003, 27, 153-162.	1.9	106
20	Intracellular δ -rhythm generation in identified hippocampal pyramids. <i>Brain Research</i> , 1987, 416, 289-300.	1.1	100
21	Nucleus incertus contribution to hippocampal theta rhythm generation. <i>European Journal of Neuroscience</i> , 2006, 23, 2731-2738.	1.2	95
22	Rare-earth-doped fluoride nanoparticles with engineered long luminescence lifetime for time-gated <i>in vivo</i> optical imaging in the second biological window. <i>Nanoscale</i> , 2018, 10, 17771-17780.	2.8	87
23	Relationships of nucleus reticularis pontis oralis neuronal discharge with sensory and carbachol evoked hippocampal theta rhythm. <i>Experimental Brain Research</i> , 1991, 87, 303-308.	0.7	82
24	The Theta Rhythm of the Hippocampus: From Neuronal and Circuit Mechanisms to Behavior. <i>Frontiers in Cellular Neuroscience</i> , 2021, 15, 649262.	1.8	79
25	Transcription factor NRF2 controls the fate of neural stem cells in the subgranular zone of the hippocampus. <i>Redox Biology</i> , 2017, 13, 393-401.	3.9	69
26	Insulin-Like Growth Factor I Modifies Electrophysiological Properties of Rat Brain Stem Neurons. <i>Journal of Neurophysiology</i> , 2003, 89, 3008-3017.	0.9	63
27	Loss of serum IGF-I input to the brain as an early biomarker of disease onset in Alzheimer mice. <i>Translational Psychiatry</i> , 2013, 3, e330-e330.	2.4	63
28	Hypocretin/Orexin Neuropeptides: Participation in the Control of Sleep- Wakefulness Cycle and Energy Homeostasis. <i>Current Neuropharmacology</i> , 2009, 7, 50-59.	1.4	51
29	<i>In vivo</i> electrophysiological analysis of lucifer yellow-coupled hippocampal pyramids. <i>Experimental Neurology</i> , 1990, 108, 76-82.	2.0	50
30	Sedentary Life Impairs Self-Reparative Processes in the Brain: The Role of Serum Insulin-like Growth Factor-I. <i>Reviews in the Neurosciences</i> , 2002, 13, 365-74.	1.4	47
31	Seizure susceptibility in the APP/PS1 mouse model of Alzheimer's disease and relationship with amyloid β^2 plaques. <i>Brain Research</i> , 2017, 1677, 93-100.	1.1	47
32	Cholinergic-mediated response enhancement in barrel cortex layer V pyramidal neurons. <i>Journal of Neurophysiology</i> , 2012, 108, 1656-1668.	0.9	43
33	Muscarinic Receptors, from Synaptic Plasticity to its Role in Network Activity. <i>Neuroscience</i> , 2021, 456, 60-70.	1.1	43
34	Local anaesthesia induces immediate receptive field changes in nucleus gracilis and cortex. <i>NeuroReport</i> , 1995, 7, 150-152.	0.6	41
35	Relationship between the perifornical hypothalamic area and oral pontine reticular nucleus in the rat. Possible implication of the hypocretinergic projection in the control of rapid eye movement sleep. <i>European Journal of Neuroscience</i> , 2006, 24, 2834-2842.	1.2	38
36	Distribution and targets of the relaxin innervation of the septal area in the rat. <i>Journal of Comparative Neurology</i> , 2012, 520, 1903-1939.	0.9	38

#	ARTICLE	IF	CITATIONS
37	Insulin and insulin-like growth factor I signalling in neurons. <i>Frontiers in Bioscience - Landmark</i> , 2007, 12, 3194.	3.0	37
38	Different discharge properties of rat facial nucleus motoneurons. <i>Neuroscience</i> , 1999, 94, 879-886.	1.1	35
39	Sensory responses in the medial prefrontal cortex of anesthetized rats. Implications for sensory processing. <i>Neuroscience</i> , 2016, 339, 109-123.	1.1	35
40	In vivo intracellular recordings of medial septal and diagonal band of Broca neurons: relationships with theta rhythm. <i>Experimental Brain Research</i> , 1995, 103, 31-40.	0.7	34
41	Control of Somatosensory Cortical Processing by Thalamic Posterior Medial Nucleus: A New Role of Thalamus in Cortical Function. <i>PLoS ONE</i> , 2016, 11, e0148169.	1.1	33
42	Membrane and circuit properties of lateral septum neurons: relationships with hippocampal rhythms. <i>Brain Research</i> , 1998, 800, 145-153.	1.1	32
43	Anatomical evidence for a ponto-septal pathway via the nucleus incertus in the rat. <i>Brain Research</i> , 2008, 1218, 87-96.	1.1	32
44	Corticofugal action on somatosensory response properties of rat nucleus gracilis cells. <i>Brain Research</i> , 1998, 810, 172-180.	1.1	30
45	Neuronal disinhibition in the trigeminal nucleus caudalis in a model of chronic neuropathic pain. <i>European Journal of Neuroscience</i> , 2010, 32, 399-408.	1.2	30
46	Electrophysiological properties and cholinergic responses of rat ventral oral pontine reticular neurons in vitro. <i>Brain Research</i> , 1997, 754, 1-11.	1.1	29
47	Basal Forebrain Nuclei Display Distinct Projecting Pathways and Functional Circuits to Sensory Primary and Prefrontal Cortices in the Rat. <i>Frontiers in Neuroanatomy</i> , 2018, 12, 69.	0.9	29
48	Posterior thalamic nucleus axon terminals have different structure and functional impact in the motor and somatosensory vibrissal cortices. <i>Brain Structure and Function</i> , 2019, 224, 1627-1645.	1.2	29
49	Neurotransmitter actions on oral pontine tegmental neurons of the rat: an in vitro study. <i>Brain Research</i> , 1998, 804, 144-148.	1.1	28
50	In vitro electrophysiological properties of rat dorsal column nuclei neurons. <i>European Journal of Neuroscience</i> , 1999, 11, 1865-1876.	1.2	28
51	Sensory information processing in the dorsal column nuclei by neuronal oscillators. <i>Neuroscience</i> , 1998, 84, 635-639.	1.1	27
52	Electrophysiological Effects of Temporary Deafferentation on Two Characterized Cell Types in the Nucleus Gracilis of the Rat. <i>European Journal of Neuroscience</i> , 1997, 9, 563-572.	1.2	26
53	Rhythmic neuronal interactions and synchronization in the rat dorsal column nuclei. <i>Neuroscience</i> , 2000, 100, 599-609.	1.1	26
54	Slow intrinsic spikes recorded in vivo in rat CA1-CA3 hippocampal pyramidal neurons. <i>Experimental Neurology</i> , 1990, 109, 294-299.	2.0	25

#	ARTICLE	IF	CITATIONS
55	Modulation of Specific Sensory Cortical Areas by Segregated Basal Forebrain Cholinergic Neurons Demonstrated by Neuronal Tracing and Optogenetic Stimulation in Mice. <i>Frontiers in Neural Circuits</i> , 2016, 10, 28.	1.4	25
56	Posterior Thalamic Nucleus Modulation of Tactile Stimuli Processing in Rat Motor and Primary Somatosensory Cortices. <i>Frontiers in Neural Circuits</i> , 2017, 11, 69.	1.4	24
57	Primary somatosensory cortex modulation of tactile responses in nucleus gracilis cells of rats. <i>European Journal of Neuroscience</i> , 2004, 19, 1572-1580.	1.2	23
58	Cholinergic modulation of sensory interference in rat primary somatosensory cortical neurons. <i>Brain Research</i> , 2007, 1133, 158-167.	1.1	22
59	Astrocytic IGF-IRs Induce Adenosine-Mediated Inhibitory Downregulation and Improve Sensory Discrimination. <i>Journal of Neuroscience</i> , 2021, 41, 4768-4781.	1.7	21
60	Modulation of mechanosensory vibrissal responses in the trigeminocervical complex by stimulation of the greater occipital nerve in a rat model of trigeminal neuropathic pain. <i>Journal of Headache and Pain</i> , 2020, 21, 96.	2.5	19
61	Tactile response adaptation to whisker stimulation in the lemniscal somatosensory pathway of rats. <i>Brain Research</i> , 2014, 1591, 27-37.	1.1	18
62	Acute exercise does not modify brain activity and memory performance in APP/PS1 mice. <i>PLoS ONE</i> , 2017, 12, e0178247.	1.1	18
63	Anterior cruciate ligament reconstruction affects proprioception in the cat's knee. <i>Acta Orthopaedica</i> , 1999, 70, 185-193.	1.4	17
64	Serum Insulin-Like Growth Factor I Deficiency Associates to Alzheimer's Disease Co-Morbidities. <i>Journal of Alzheimer's Disease</i> , 2019, 69, 979-987.	1.2	17
65	Insulin-like growth factor I modulates sleep through hypothalamic orexin neurons. <i>FASEB Journal</i> , 2020, 34, 15975-15990.	0.2	16
66	Frequency potentiation in granule cells in vivo at \hat{I} , frequency perforant path stimulation. <i>Experimental Neurology</i> , 1991, 113, 74-78.	2.0	15
67	Local anaesthesia induces immediate receptive field changes in nucleus gracilis and cortex. <i>NeuroReport</i> , 1995, 7, 150-152.	0.6	15
68	Neural and muscular electric activity in the cat's knee: Changes when the anterior cruciate ligament is transected. <i>Acta Orthopaedica</i> , 1997, 68, 149-155.	1.4	15
69	Loss of neuromuscular control related to motion in the acutely ACL-injured knee: an experimental study. <i>European Journal of Applied Physiology</i> , 2008, 104, 567-577.	1.2	15
70	Synaptic interactions between perifornical lateral hypothalamic area, locus coeruleus nucleus and the oral pontine reticular nucleus are implicated in the stage succession during sleep-wakefulness cycle. <i>Frontiers in Neuroscience</i> , 2013, 7, 216.	1.4	15
71	Corticofugal modulation of sensory information. <i>Advances in Anatomy, Embryology and Cell Biology</i> , 2007, 187, 1 p following table of contents, 1-74.	1.0	15
72	Independent alterations in the central and peripheral somatosensory pathways in rat diabetic neuropathy. <i>Neuroscience</i> , 2009, 160, 402-411.	1.1	14

#	ARTICLE	IF	CITATIONS
73	Intracellular effects of QX-314 and Cs ⁺ in hippocampal pyramidal neurons in vivo. <i>Experimental Neurology</i> , 1992, 115, 266-270.	2.0	13
74	Properties and plasticity of synaptic inputs to rat dorsal column neurones recorded in vitro. <i>Journal of Physiology</i> , 2001, 535, 483-495.	1.3	13
75	Firing activity and postsynaptic properties of morphologically identified neurons of ventral oral pontine reticular nucleus. <i>Neuroscience</i> , 2002, 115, 1165-1175.	1.1	13
76	Sensory-interference in rat primary somatosensory cortical neurons. <i>European Journal of Neuroscience</i> , 2004, 19, 766-770.	1.2	13
77	Nociceptive stimuli induce changes in somatosensory responses of rat dorsal column nuclei neurons. <i>Brain Research</i> , 2004, 1025, 169-176.	1.1	13
78	Corticofugal Modulation of the Tactile Response Coherence of Projecting Neurons in the Gracilis Nucleus. <i>Journal of Neurophysiology</i> , 2007, 98, 2537-2549.	0.9	13
79	Inhibitory control of nociceptive responses of trigeminal spinal nucleus cells by somatosensory corticofugal projection in rat. <i>Neuroscience</i> , 2012, 221, 115-124.	1.1	13
80	Bilateral Pathways from the Basal Forebrain to Sensory Cortices May Contribute to Synchronous Sensory Processing. <i>Frontiers in Neuroanatomy</i> , 2018, 12, 5.	0.9	12
81	Systemic administration of a fibroblast growth factor receptor 1 agonist rescues the cognitive deficit in aged socially isolated rats. <i>Neurobiology of Aging</i> , 2019, 78, 155-165.	1.5	12
82	Implication of type 4 NADPH oxidase (NOX4) in tauopathy. <i>Redox Biology</i> , 2022, 49, 102210.	3.9	12
83	Frequency-specific response facilitation of supra and infragranular barrel cortical neurons depends on NMDA receptor activation in rats. <i>Neuroscience</i> , 2014, 281, 178-194.	1.1	11
84	Cholinergic Modulation of Synaptic Transmission and Postsynaptic Excitability in the Rat Gracilis Dorsal Column Nucleus. <i>Journal of Neuroscience</i> , 2006, 26, 4015-4025.	1.7	10
85	Insulin-like growth factor I mitigates post-traumatic stress by inhibiting AMP-kinase in orexin neurons. <i>Molecular Psychiatry</i> , 2022, , .	4.1	10
86	Neuron synchronization in the rat gracilis nucleus facilitates sensory transmission in the somatosensory pathway. <i>European Journal of Neuroscience</i> , 2009, 30, 593-601.	1.2	9
87	Corticofugal projections induce long-lasting effects on somatosensory responses in the trigeminal complex of the rat. <i>Frontiers in Systems Neuroscience</i> , 2014, 8, 100.	1.2	9
88	Participation of calbindin-D28K in nociception: results from calbindin-D28K knockout mice. <i>Pflügers Archiv European Journal of Physiology</i> , 2012, 463, 449-458.	1.3	8
89	Cortical Neural Computation by Discrete Results Hypothesis. <i>Frontiers in Neural Circuits</i> , 2016, 10, 81.	1.4	7
90	Spontaneous Activity and Responses to Sensory Stimulation in Ventrobasal Thalamic Neurons in the Rat: An In Vivo Intracellular Recording and Staining Study. <i>Somatosensory & Motor Research</i> , 1994, 11, 89-98.	0.4	6

#	ARTICLE	IF	CITATIONS
91	Reduced Insulin-Like Growth Factor-I Effects in the Basal Forebrain of Aging Mouse. <i>Frontiers in Aging Neuroscience</i> , 2021, 13, 682388.	1.7	6
92	Higher-Order Thalamic Encoding of Somatosensory Patterns and Bilateral Events. <i>Frontiers in Neural Circuits</i> , 2021, 15, 752804.	1.4	5
93	Proprioception in the ACL-ruptured knee: The contribution of the medial collateral ligament and patellar ligament. An in vivo experimental study in the cat. <i>Knee</i> , 2007, 14, 39-45.	0.8	4
94	Medial Prefrontal Cortical Modulation of Whisker Thalamic Responses in Anesthetized Rats. <i>Neuroscience</i> , 2019, 406, 626-636.	1.1	4
95	Response Adaptation in Barrel Cortical Neurons Facilitates Stimulus Detection during Rhythmic Whisker Stimulation in Anesthetized Mice. <i>ENeuro</i> , 2019, 6, ENEURO.0471-18.2019.	0.9	4
96	Insulin-like growth factor I sensitization rejuvenates sleep patterns in old mice. <i>GeroScience</i> , 2022, 44, 2243-2257.	2.1	4
97	Bidirectional Hebbian Plasticity Induced by Low-Frequency Stimulation in Basal Dendrites of Rat Barrel Cortex Layer 5 Pyramidal Neurons. <i>Frontiers in Cellular Neuroscience</i> , 2017, 11, 8.	1.8	3
98	GABAergic Mechanisms in the Ventral Oral Pontine Tegmentum: The REM Sleep-Induction Site “ in the Modulation of Sleep-Wake States. , 2010, , 233-252.		3
99	Corticofugal Modulation of Tactile Responses of Neurons in the Spinal Trigeminal Nucleus. , 2009, , 1-19.		2
100	Response Facilitation Induced by Insulin-like Growth Factor-I in the Primary Somatosensory Cortex of Mice Was Reduced in Aging. <i>Cells</i> , 2022, 11, 717.	1.8	2
101	Periarticular muscle stimulation controls anterior tibial laxity after experimental ACL section: an experimental study. <i>Archives of Orthopaedic and Trauma Surgery</i> , 2009, 129, 1053-1061.	1.3	1
102	Seizure susceptibility in Alzheimer’s disease. <i>Medical Research Archives</i> , 2021, 9, .	0.1	1
103	IGF1 modulates sleep patterns through orexinergic neurons: Role in aging. <i>Alzheimer's and Dementia</i> , 2020, 16, e043430.	0.4	0
104	Metabotropic Regulation of Synaptic Plasticity. <i>Neuroscience</i> , 2021, 456, 1-3.	1.1	0
105	Histamine opposite actions in dorsal and ventral pontine tegmentum regions involved in sleep-wake regulation. <i>Proceedings for Annual Meeting of the Japanese Pharmacological Society</i> , 2018, WCP2018, PO4-1-88.	0.0	0
106	Cholinergic and cortical activity is recovered by insulin-like growth factor I in aging mice brains.. <i>Alzheimer's and Dementia</i> , 2021, 17 Suppl 3, e054655.	0.4	0
107	Loss of sensitivity to insulin-like growth factor I in orexin neurons is associated to perturbed sleep patterns during aging.. <i>Alzheimer's and Dementia</i> , 2021, 17 Suppl 3, e054682.	0.4	0