

# Carlos Avendaño

## List of Publications by Year in descending order

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88  
papers

2,686  
citations

136950

32  
h-index

214800

47  
g-index

92  
all docs

92  
docs citations

92  
times ranked

2996  
citing authors

#	ARTICLE	IF	CITATIONS
1	Delayed Inner Ear Maturation and Neuronal Loss in Postnatal <i>Igf-1</i> -Deficient Mice. <i>Journal of Neuroscience</i> , 2001, 21, 7630-7641.	3.6	164
2	Mapping of fluorescent protein-expressing neurons and axon pathways in adult and developing Thy1-eYFP-H transgenic mice. <i>Brain Research</i> , 2010, 1345, 59-72.	2.2	163
3	The nigrostriatal system in the presymptomatic and symptomatic stages in the MPTP monkey model: A PET, histological and biochemical study. <i>Neurobiology of Disease</i> , 2012, 48, 79-91.	4.4	93
4	Evidence for an amygdaloid projection to premotor cortex but not to motor cortex in the monkey. <i>Brain Research</i> , 1983, 264, 111-117.	2.2	79
5	Organization of the association cortical afferent connections of area 5: A retrograde tracer study in the cat. <i>Journal of Comparative Neurology</i> , 1988, 278, 1-33.	1.6	77
6	Microglial HO-1 induction by curcumin provides antioxidant, antineuroinflammatory, and glioprotective effects. <i>Molecular Nutrition and Food Research</i> , 2015, 59, 1690-1700.	3.3	69
7	Cochlear abnormalities in insulin-like growth factor-1 mouse mutants. <i>Hearing Research</i> , 2002, 170, 2-11.	2.0	65
8	Amygdaloid projections to prefrontal and motor cortex. <i>Science</i> , 1977, 195, 794-796.	12.6	64
9	Quantitative stereological evaluation of the gracile and cuneate nuclei and their projection neurons in the rat. <i>Journal of Comparative Neurology</i> , 2003, 463, 419-433.	1.6	55
10	Distribution of somatostatin-like immunoreactivity in the monkey amygdala. <i>Journal of Comparative Neurology</i> , 1989, 284, 294-313.	1.6	54
11	Behavioral testing in rodent models of orofacial neuropathic and inflammatory pain. <i>Brain and Behavior</i> , 2012, 2, 678-697.	2.2	54
12	Neuron numbers in the sensory trigeminal nuclei of the rat: A GABA- and glycine-immunocytochemical and stereological analysis. <i>Journal of Comparative Neurology</i> , 2005, 493, 538-553.	1.6	52
13	Thalamic projections to areas 5a and 5b of the parietal cortex in the cat: a retrograde horseradish peroxidase study. <i>Journal of Neuroscience</i> , 1985, 5, 1446-1470.	3.6	51
14	Fiber composition of the rat sciatic nerve and its modification during regeneration through a sieve electrode. <i>Brain Research</i> , 2008, 1190, 65-77.	2.2	51
15	The effects of neonatal 6-hydroxydopamine treatment on morphological plasticity in the dentate gyrus of the rat following entorhinal lesions. <i>Journal of Comparative Neurology</i> , 1980, 194, 171-191.	1.6	50
16	Thalamocortical neurons projecting to superficial and to deep layers in parietal, frontal and prefrontal regions in the cat. <i>Brain Research</i> , 1985, 347, 159-165.	2.2	48
17	The pretectal region of the cat: A structural and topographical study with stereotaxic coordinates. <i>Journal of Comparative Neurology</i> , 1980, 193, 69-88.	1.6	47
18	Area 3a in the cat II. Projections to the motor cortex and their relations to other corticocortical connections. <i>Journal of Comparative Neurology</i> , 1992, 321, 373-386.	1.6	46

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19	Morphometric study of focal cerebral ischemia in rats: a stereological evaluation. <i>Brain Research</i> , 1995, 673, 83-92.	2.2	46
20	Assessing nociceptive sensitivity in mouse models of inflammatory and neuropathic trigeminal pain. <i>Journal of Neuroscience Methods</i> , 2011, 201, 46-54.	2.5	46
21	Primary Sensory Neuron Addition in the Adult Rat Trigeminal Ganglion: Evidence for Neural Crest Glio-Neuronal Precursor Maturation. <i>Journal of Neuroscience</i> , 2007, 27, 7939-7953.	3.6	45
22	The Glutamatergic System in Primary Somatosensory Neurons and Its Involvement in Sensory Input-Dependent Plasticity. <i>International Journal of Molecular Sciences</i> , 2018, 19, 69.	4.1	44
23	Differential growth of axons from sensory and motor neurons through a regenerative electrode: A stereological, retrograde tracer, and functional study in the rat. <i>Neuroscience</i> , 2004, 128, 605-615.	2.3	43
24	Innervation from the claustrum of the frontal association and motor areas: Axonal transport studies in the cat. <i>Journal of Comparative Neurology</i> , 1992, 326, 402-422.	1.6	42
25	Local anaesthesia induces immediate receptive field changes in nucleus gracilis and cortex. <i>NeuroReport</i> , 1995, 7, 150-152.	1.2	41
26	Thalamic afferents to the motor cortex in the cat. A horseradish peroxidase study. <i>Neuroscience Letters</i> , 1982, 33, 229-233.	2.1	39
27	Segregation and heterogeneity of thalamic cell populations projecting to superficial layers of posterior parietal cortex: A retrograde tracer study in cat and monkey. <i>Neuroscience</i> , 1990, 39, 547-559.	2.3	38
28	Acetylcholine innervation of sensory and motor neocortical areas in adult cat: a choline acetyltransferase immunohistochemical study. <i>Journal of Chemical Neuroanatomy</i> , 1996, 11, 113-130.	2.1	38
29	A stereological analysis of the lateral geniculate nucleus in adult <i>Macaca nemestrina</i> monkeys. <i>Visual Neuroscience</i> , 1999, 16, 933-941.	1.0	37
30	Hippocampal cell loss in transient global cerebral ischemia in rats: a critical assessment. <i>Neuroscience</i> , 1999, 93, 71-80.	2.3	36
31	Reduction of Infarct Size by Intra-Arterial Nimodipine Administered at Reperfusion in a Rat Model of Partially Reversible Brain Focal Ischemia. <i>Stroke</i> , 1995, 26, 1888-1892.	2.0	36
32	Insulin Receptor Substrate 2 (IRS2)-Deficient Mice Show Sensorineural Hearing Loss That Is Delayed by Concomitant Protein Tyrosine Phosphatase 1B (PTP1B) Loss of Function. <i>Molecular Medicine</i> , 2012, 18, 260-269.	4.4	34
33	Area 3a in the cat. I. A reevaluation of its location and architecture on the basis of Nissl, myelin, acetylcholinesterase, and cytochrome oxidase staining. <i>Journal of Comparative Neurology</i> , 1992, 321, 357-372.	1.6	31
34	Neuronal disinhibition in the trigeminal nucleus caudalis in a model of chronic neuropathic pain. <i>European Journal of Neuroscience</i> , 2010, 32, 399-408.	2.6	30
35	Sensory information processing in the dorsal column nuclei by neuronal oscillators. <i>Neuroscience</i> , 1998, 84, 635-639.	2.3	27
36	DREAM Regulates BDNF-Dependent Spinal Sensitization. <i>Molecular Pain</i> , 2010, 6, 1744-8069-6-95.	2.1	27

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37	Projections to gyrus sigmoideus from the substantia nigra in the cat, as revealed by the horseradish peroxidase retrograde transport technique. <i>Neuroscience Letters</i> , 1976, 2, 61-65.	2.1	26
38	Decrease and long-term recovery of choline acetyltransferase immunoreactivity in adult cat somatosensory cortex after peripheral nerve transections. <i>Journal of Comparative Neurology</i> , 1995, 354, 321-332.	1.6	26
39	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.	2.6	26
40	Rhythmic neuronal interactions and synchronization in the rat dorsal column nuclei. <i>Neuroscience</i> , 2000, 100, 599-609.	2.3	26
41	Evolution of cortical responsiveness subsequent to multiple forelimb nerve transections: An electrophysiological study in adult cat somatosensory cortex. <i>Journal of Comparative Neurology</i> , 1995, 354, 333-344.	1.6	25
42	Swept-sine noise-induced damage as a hearing loss model for preclinical assays. <i>Frontiers in Aging Neuroscience</i> , 2015, 7, 7.	3.4	25
43	Pallido-cortical projections in the cat studied by means of the horseradish peroxidase retrograde transport technique. <i>Neuroscience Letters</i> , 1982, 29, 225-229.	2.1	24
44	General plan of the thalamic projections to the prefrontal cortex in the cat. <i>Brain Research</i> , 1987, 407, 17-26.	2.2	24
45	Amygdaloid projections to the motor, premotor and prefrontal areas of the cat's cerebral cortex: A topographical study using retrograde transport of horseradish peroxidase. <i>Neuroscience</i> , 1985, 15, 651-657.	2.3	23
46	Quantitative analysis of anatomical changes in the cuneate nucleus following forelimb denervation: A stereological morphometric study in adult cats. <i>Journal of Comparative Neurology</i> , 1996, 370, 491-500.	1.6	23
47	Iron Overload Exacerbates the Risk of Hemorrhagic Transformation After tPA (Tissue-Type) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50	2.0	23
48	A study of glial cell proliferation in the molecular layer of the dentate gyrus of the rat following interruption of the ventral hippocampal commissure. <i>Anatomy and Embryology</i> , 1979, 157, 347-366.	1.5	20
49	Lateral asymmetries in the trigeminal ganglion of the male rat. <i>Brain Research</i> , 2000, 865, 202-210.	2.2	20
50	The size of the whisker barrel field in adult rats: minimal nondirectional asymmetry and limited modifiability by chronic changes of the sensory input. <i>Brain Research</i> , 2004, 1025, 130-138.	2.2	20
51	The intraluminal thread model revisited: rat strain differences in local cerebral blood flow. <i>Neurological Research</i> , 2005, 27, 47-52.	1.3	20
52	Influence of Acidic Fibroblast Growth Factor on Bone Regeneration in Experimental Cranial Defects Using Spongostan and Bio-Oss as Protein Carriers. <i>Journal of Craniofacial Surgery</i> , 2013, 24, 1507-1514.	0.7	20
53	Chronic administration of P2X7 receptor antagonist JNJ-47965567 delays disease onset and progression, and improves motor performance in ALS SOD1G93A female mice. <i>DMM Disease Models and Mechanisms</i> , 2020, 13, .	2.4	19
54	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.	6.0	19

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55	Definite segregation of cortical neurons projecting to the dorsal column nuclei in the rat. <i>NeuroReport</i> , 2001, 12, 413-416.	1.2	18
56	Effects of Removal of Dietary Polyunsaturated Fatty Acids on Plasma Extravasation and Mechanical Allodynia in a Trigeminal Neuropathic Pain Model. <i>Molecular Pain</i> , 2009, 5, 1744-8069-5-8.	2.1	18
57	Evaluation of Evans Blue extravasation as a measure of peripheral inflammation. <i>Protocol Exchange</i> , 0, , .	0.3	17
58	Cytoarchitecture and responsiveness of the medial ansate region of the cat primary somatosensory cortex. <i>Journal of Comparative Neurology</i> , 1994, 349, 401-427.	1.6	16
59	Reevaluation of area 3b in the cat based on architectonic and electrophysiological studies: Regional variability with functional and anatomical consistencies. <i>Journal of Comparative Neurology</i> , 1994, 341, 357-374.	1.6	15
60	Neural Prosthesis: Electrophysiological and Histological Evaluation of Central Nervous System Alterations Due to Long-Term Implants of Sieve Electrodes to Peripheral Nerves in Cats. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2008, 16, 223-232.	4.9	15
61	Central Demyelination in the Pathogenesis of Trigeminal Neuralgia Associated With Cerebellopontine Angle Tumors. <i>Neurosurgery</i> , 2010, 66, E841-E842.	1.1	14
62	Effects of long-term sensory deprivation on asymmetric synapses in the whisker barrel field of the adult rat. <i>Brain Research</i> , 2006, 1107, 104-110.	2.2	12
63	Comparative gene expression study of the vestibular organ of the Igf1 deficient mouse using whole-transcript arrays. <i>Hearing Research</i> , 2015, 330, 62-77.	2.0	12
64	IGF-1 Haploinsufficiency Causes Age-Related Chronic Cochlear Inflammation and Increases Noise-Induced Hearing Loss. <i>Cells</i> , 2021, 10, 1686.	4.1	12
65	Local anaesthesia induces immediate receptive field changes in nucleus gracilis and cortex. <i>NeuroReport</i> , 1995, 7, 150-2.	1.2	12
66	A Stereological Analysis of the Numerical Distribution of Neurons in Dorsal Root Ganglia C <sub>4</sub> -T <sub>2</sub> in Adult Macaque Monkeys. <i>Somatosensory &amp; Motor Research</i> , 1996, 13, 59-66.	0.9	11
67	Stereology of Neural Connections: An Overview. , 2006, , 477-529.		11
68	Chronic electrical stimulation of transected peripheral nerves preserves anatomy and function in the primary somatosensory cortex. <i>European Journal of Neuroscience</i> , 2012, 36, 3679-3690.	2.6	11
69	Effects of Adult Female Rat Androgenization on Brain Morphology and Metabolomic Profile. <i>Cerebral Cortex</i> , 2018, 28, 2846-2853.	2.9	11
70	The greater occipital nerve and its spinal and brainstem afferent projections: A stereological and tract-tracing study in the rat. <i>Journal of Comparative Neurology</i> , 2018, 526, 3000-3019.	1.6	10
71	Mathematical foundations of the dendritic growth models. <i>Journal of Mathematical Biology</i> , 2007, 55, 817-859.	1.9	9
72	Sensory Input-Dependent Changes in Glutamatergic Neurotransmission- Related Genes and Proteins in the Adult Rat Trigeminal Ganglion. <i>Frontiers in Molecular Neuroscience</i> , 2016, 9, 132.	2.9	9

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73	Thalamic projections to the anterior suprasylvian and posterior sigmoid cortex: An HRP study of the œvestibular areas of the cerebral cortex in the cat. Brain Research Bulletin, 1984, 12, 245-252.	3.0	8
74	Evolution of morphological and histochemical changes in the adult cat cuneate nucleus following forelimb denervation. , 1996, 370, 479-490.		8
75	Striatal projections from the lateral and posterior thalamic complexes. An anterograde tracer study in the cat. Histochemistry and Cell Biology, 2006, 125, 265-271.	1.7	8
76	Trigeminothalamic barrelette neurons: natural structural side asymmetries and sensory input-dependent plasticity in adult rats. Neuroscience, 2009, 163, 1242-1254.	2.3	8
77	Changes in the axon terminals of primary afferents from a single vibrissa in the rat trigeminal nuclei after active touch deprivation or exposure to an enriched environment. Brain Structure and Function, 2018, 223, 47-61.	2.3	8
78	Anatomical and functional connectivity of the transected ulnar nerve after intercostal neurotization in cats. Journal of Neurosurgery, 1999, 90, 1057-1063.	1.6	7
79	Spontaneous Activity and Responses to Sensory Stimulation in Ventrobasal Thalamic Neurons in the Rat: An In Vivo Intracellular Recording and Staining Study. Somatosensory & Motor Research, 1994, 11, 89-98.	0.9	6
80	Trigeminal intersubnuclear neurons: Morphometry and input-dependent structural plasticity in adult rats. Journal of Comparative Neurology, 2014, 522, 1597-1617.	1.6	6
81	A fine structural study of the cells that proliferate in the partially denervated dentate gyrus of the rat. Anatomy and Embryology, 1983, 166, 317-332.	1.5	5
82	Suppression of reactive glial proliferation in the denervated dentate gyrus of the rat: effects on the pattern of acetylcholinesterase staining in the molecular layer. Brain Research, 1983, 265, 160-162.	2.2	5
83	Multiple Morphometric Assessment of Microglial Cells in Deafferented Spinal Trigeminal Nucleus. Frontiers in Neuroanatomy, 2019, 13, 103.	1.7	5
84	Structural preservation of deafferented cortex induced by electrical stimulation of a sensory peripheral nerve. , 2010, 2010, 5066-9.		4
85	Microglia and Inhibitory Circuitry in the Medullary Dorsal Horn: Laminar and Time-Dependent Changes in a Trigeminal Model of Neuropathic Pain. International Journal of Molecular Sciences, 2021, 22, 4564.	4.1	2
86	Neural activity of the Central Nervous System after long-term implants of sieve-electrodes to the peripheral nerves. , 2007, , .		0
87	Experience-dependent plasticity in early stations of sensory processing in mature brains: effects of environmental enrichment on dendrite measures in trigeminal nuclei. Brain Structure and Function, 2022, 227, 865-879.	2.3	0
88	Clinical trial committees in Europe. Methods and Findings in Experimental and Clinical Pharmacology, 1998, 20 Suppl A, 19.	0.8	0