Pablo Rudomin

List of Publications by Year
in descending order

73 papers	3,289 citations	147801 31 h-index	155660 55 g-index
74 all docs	74 docs citations	74 times ranked	1141 citing authors

#	Article	IF	Citations
1	Presynaptic inhibition in the vertebrate spinal cord revisited. Experimental Brain Research, 1999, 129, 1-37.	1.5	634
2	Presynaptic inhibition of muscle spindle and tendon organ afferents in the mammalian spinal cord. Trends in Neurosciences, 1990, 13, 499-505.	8.6	218
3	Sites of action of segmental and descending control of transmission on pathways mediating PAD of Ia- and Ib-afferent fibers in cat spinal cord. Journal of Neurophysiology, 1983, 50, 743-769.	1.8	126
4	Observations on neuronal pathways subserving primary afferent depolarization.. Journal of Neurophysiology, 1981, 46, 506-516.	1.8	109
5	In search of lost presynaptic inhibition. Experimental Brain Research, 2009, 196, 139-151.	1.5	102
6	Synaptic potentials of primary afferent fibers and motoneurons evoked by single intermediate nucleus interneurons in the cat spinal cord. Journal of Neurophysiology, 1987, 57, 1288-1313.	1.8	101
7	Local control of information flow in segmental and ascending collaterals of single afferents. Nature, 1998, 395, 600-604.	27.8	91
8	PAD and PAH response patterns of group Ia- and Ib-fibers to cutaneous and descending inputs in the cat spinal cord. Journal of Neurophysiology, 1986, 56, 987-1006.	1.8	85
9	Mechanisms involved in presynaptic depolarization of group I and rubrospinal fibers in cat spinal cord.. Journal of Neurophysiology, 1981, 46, 532-548.	1.8	84
10	Excitability changes of ankle extensor group Ia and Ib fibers during fictive locomotion in the cat. Experimental Brain Research, 1988, 70, 15-25.	1.5	77
11	Effects of conditioning afferent volleys on variability of monosynaptic responses of extensor motoneurons.. Journal of Neurophysiology, 1969, 32, 140-157.	1.8	74
12	Supraspinal control of a short-latency cutaneous pathway to hindlimb motoneurons. Experimental Brain Research, 1988, 69, 449-59.	1.5	70
13	Primary afferent depolarization and flexion reflexes produced by radiant heat stimulation of the skin. Journal of Physiology, 1971, 213, 185-214.	2.9	62
14	The influence of the gamma system on cross-correlated activity of Ia muscle spindles and its relation to information transmission. Neuroscience Letters, 1979, 13, 73-78.	2.1	60
15	Selective cortical control of information flow through different intraspinal collaterals of the same muscle afferent fiber. Brain Research, 1994, 643, 328-333.	2.2	56
16	Presynaptic inhibition induced by vagal afferent volleys.. Journal of Neurophysiology, 1967, 30, 964-981.	1.8	54
17	Primary afferent hyperpolarization and presynaptic facilitation of Ia afferent terminals induced by large cutaneous fibers.. Journal of Neurophysiology, 1974, 37, 413-429.	1.8	49
18	Control by Preynaptic Correlation: a mechanism affecting information transmission from Ia fibers to motoneurons. Journal of Neurophysiology, 1975, 38, 267-284.	1.8	49

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19	PAD patterns of physiologically identified afferent fibres from the medial gastrocnemius muscle. Experimental Brain Research, 1988, 71, 643-657.	1.5	48
20	Activation of brainstem serotoninergic pathways decreases homosynaptic depression of monosynaptic responses of frog spinal motoneurons. Brain Research, 1983, 280, 373-378.	2.2	44
21	Selective cortical and segmental control of primary afferent depolarization of single muscle afferents in the cat spinal cord. Experimental Brain Research, 1997, 113, 411-430.	1.5	41
22	Modulation of synaptic effectiveness of Ia and descending fibers in cat spinal cord. Journal of Neurophysiology, 1975, 38, 1181-1195.	1.8	40
23	Identification of common interneurons mediating pre- and postsynaptic inhibition in the cat spinal cord. Science, 1984, 224, 1453-1456.	12.6	40
24	Mechanisms involved in the depolarization of cutaneous afferents produced by segmental and descending inputs in the cat spinal cord. Experimental Brain Research, 1987, 69, 195-207.	1.5	40
25	Presynaptic depolarization of unmyelinated primary afferent fibers in the spinal cord of the cat. Neuroscience, 1982, 7, 1389-1400.	2.3	39
26	Pharmacologic analysis of inhibition produced by last-order intermediate nucleus interneurons mediating nonreciprocal inhibition of motoneurons in cat spinal cord. Journal of Neurophysiology, 1990, 63, 147-160.	1.8	39
27	Modulation of synaptic transmission from segmental afferents by spontaneous activity of dorsal horn spinal neurones in the cat. Journal of Physiology, 2000, 529, 445-460.	2.9	38
28	Selectivity of the Central Control of Sensory Information in the Mammalian Spinal Cord. Advances in Experimental Medicine and Biology, 2002, 508, 157-170.	1.6	34
29	Segmental and supraspinal control of synaptic effectiveness of functionally identified muscle afferents in the cat. Experimental Brain Research, 1996, 107, 391-404.	1.5	33
30	Patterns of connectivity of spinal interneurons with single muscle afferents. Experimental Brain Research, 1997, 115, 387-402.	1.5	33
31	Effect of muscle and cutaneous afferent nerve volleys on excitability fluctuations of Ia terminals.. Journal of Neurophysiology, 1969, 32, 158-169.	1.8	31
32	Primary Afferent Depolarization Evoked by a Painful Stimulus. Science, 1969, 165, 184-186.	12.6	31
33	Primary afferent depolarization of muscle afferents elicited by stimulation of joint afferents in cats with intact neuraxis and during reversible spinalization. Journal of Neurophysiology, 1993, 70, 1899-1910.	1.8	31
34	Raphe magnus and reticulospinal actions on primary afferent depolarization of group I muscle afferents in the cat.. Journal of Physiology, 1995, 482, 623-640.	2.9	29
35	A method for the dynamic continuous estimation of excitability changes of single fiber terminals in the central nervous system. Neuroscience Letters, 1979, 11, 253-258.	2.1	28
36	Differential action of (?)-baclofen on the primary afferent depolarization produced by segmental and descending inputs. Experimental Brain Research, 1992, 91, 29-45.	1.5	28

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37	Intersegmental synchronization of spontaneous activity of dorsal horn neurons in the cat spinal cord. Experimental Brain Research, 2003, 148, 401-413.	1.5	28
38	Changes in correlation between monosynaptic responses of single motoneurons and in information transmission produced by conditioning volleys to cutaneous nerves.. Journal of Neurophysiology, 1972, 35, 44-64.	1.8	25
39	Interaction of baseline synaptic noise and Ia EPSPs: evidence for appreciable negative correlation under physiological conditions. Journal of Neurophysiology, 1991, 65, 927-945.	1.8	24
40	Changes in correlation between spontaneous activity of dorsal horn neurones lead to differential recruitment of inhibitory pathways in the cat spinal cord. Journal of Physiology, 2012, 590, 1563-1584.	2.9	24
41	Effects of Presynaptic and Postsynaptic Inhibition on the Variability of the Monosynaptic Reflex. Nature, 1967, 216, 292-293.	27.8	22
42	Specific and nonspecific mechanisms involved in generation of PAD of group Ia afferents in cat spinal cord. Journal of Neurophysiology, 1984, 52, 921-940.	1.8	21
43	Evidence of two different mechanisms involved in the generation of presynaptic depolarization of afferent and rubrospinal fibers in the cat spinal cord. Brain Research, 1980, 189, 256-261.	2.2	20
44	Multichannel Detrended Fluctuation Analysis Reveals Synchronized Patterns of Spontaneous Spinal Activity in Anesthetized Cats. PLoS ONE, 2011, 6, e26449.	2.5	20
45	Changes in PAD patterns of group I muscle afferents after a peripheral nerve crush. Experimental Brain Research, 1996, 107, 405-20.	1.5	18
46	Differential modulation of primary afferent depolarization of segmental and ascending intraspinal collaterals of single muscle afferents in the cat spinal cord. Experimental Brain Research, 2004, 156, 377-391.	1.5	18
47	Specific and potassium components in the depolarization of the Ia afferents in the spinal cord of the cat. Brain Research, 1983, 272, 179-184.	2.2	17
48	Chapter 9 Selectivity of Presynaptic Inhibition: a Mechanism for Independent Control of Information Flow through Individual Collaterals of Single Muscle Spindle Afferents. Progress in Brain Research, 1999, 123, 109-117.	1.4	15
49	Tonic differential supraspinal modulation of PAD and PAH of segmental and ascending intraspinal collaterals of single group I muscle afferents in the cat spinal cord. Experimental Brain Research, 2004, 159, 239-250.	1.5	15
50	Dynamic synchronization of ongoing neuronal activity across spinal segments regulates sensory information flow. Journal of Physiology, 2015, 593, 2343-2363.	2.9	15
51	Effects of spinal and peripheral nerve lesions on the intersegmental synchronization of the spontaneous activity of dorsal horn neurons in the cat lumbosacral spinal cord. Neuroscience Letters, 2004, 361, 102-105.	2.1	13
52	Changes in synaptic effectiveness of myelinated joint afferents during capsaicin-induced inflammation of the footpad in the anesthetized cat. Experimental Brain Research, 2008, 187, 71-84.	1.5	12
53	Changes in correlation between monosynaptic reflexes produced by conditioning afferent volleys.. Journal of Neurophysiology, 1969, 32, 759-772.	1.8	11
54	Tonic and phasic differential GABAergic inhibition of synaptic actions of joint afferents in the cat. Experimental Brain Research, 2006, 176, 98-118.	1.5	11

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55	Supraspinal modulation of neuronal synchronization by nociceptive stimulation induces an enduring reorganization of dorsal horn neuronal connectivity. Journal of Physiology, 2018, 596, 1747-1776.	2.9	11
56	CONTRIBUTION OF LOCAL ACTIVITY AND ELECTRIC SPREAD TO SOMATICALLY EVOKED POTENTIALS IN DIFFERENT AREAS OF THE HYPOTHALAMUS. Archives Italiennes De Biologie, 1965, 103, 119-35.	0.4	11
57	Primary afferent depolarization produced in AÎ´ and C fibres by glutamate spillover? New ways to look at old things. Journal of Physiology, 2000, 528, 1-1.	2.9	10
58	Chapter 31 Central control of information transmission through the intraspinal arborizations of sensory fibers examined 100 years after RamÃ³n y Cajal. Progress in Brain Research, 2002, 136, 409-421.	1.4	10
59	Persistence of PAD and presynaptic inhibition of muscle spindle afferents after peripheral nerve crush. Brain Research, 2004, 1027, 179-187.	2.2	9
60	Effects of pad on conduction of action potentials within segmental and ascending branches of single muscle affÃ©rents in the cat spinal cord. Experimental Brain Research, 2000, 135, 204-214.	1.5	7
61	A machine learning methodology for the selection and classification of spontaneous spinal cord dorsum potentials allows disclosure of structured (non-random) changes in neuronal connectivity induced by nociceptive stimulation. Frontiers in Neuroinformatics, 2015, 9, 21.	2.5	7
62	Patterns of primary afferent depolarization of segmental and ascending intraspinal collaterals of single joint afferents in the cat. Experimental Brain Research, 2006, 176, 119-131.	1.5	6
63	Supraspinal Shaping of Adaptive Transitions in the State of Functional Connectivity Between Segmentally Distributed Dorsal Horn Neuronal Populations in Response to Nociception and Antinociception. Frontiers in Systems Neuroscience, 2019, 13, 47.	2.5	5
64	Markovian Analysis of the Sequential Behavior of the Spontaneous Spinal Cord Dorsum Potentials Induced by Acute Nociceptive Stimulation in the Anesthetized Cat. Frontiers in Computational Neuroscience, 2017, 11, 32.	2.1	4
65	Central Control of Sensory Information. Research Notes in Neural Computing, 1993, , 116-135.	0.1	4
66	A new feature extraction method for signal classification applied to cord dorsum potential detection. Journal of Neural Engineering, 2012, 9, 056009.	3.5	3
67	Differential presynaptic control of the synaptic effectiveness of cutaneous afferents evidenced by effects produced by acute nerve section. Journal of Physiology, 2013, 591, 2629-2645.	2.9	3
68	Modeling zero-lag synchronization of dorsal horn neurons during the traveling of electrical waves in the cat spinal cord. Physiological Reports, 2013, 1, e00021.	1.7	3
69	Descending inhibition selectively counteracts the capsaicin-induced facilitation of dorsal horn neurons activated by joint nociceptive afferents. Experimental Brain Research, 2019, 237, 1629-1641.	1.5	2
70	Nociception induces a differential presynaptic modulation of the synaptic efficacy of nociceptive and proprioceptive joint afferents. Experimental Brain Research, 2021, 239, 2375-2397.	1.5	2
71	Discrete field potentials produced by coherent activation of spinal dorsal horn neurons. Experimental Brain Research, 2022, 240, 665-686.	1.5	2
72	Intersegmental Synchronization of Spontaneous Cord Dorsum Potentials as a Clinical Parameter to Evaluate Changes in Neuronal Connectivity Produced by Peripheral Nerve and Spinal Cord Damage. Biosystems and Biorobotics, 2013, , 563-567.	0.3	1

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73	Primary afferent depolarization and presynaptic inhibition in the mammalian spinal cord. Puerto Rico Health Sciences Journal, 1988, 7, 155-66.	0.2	0