Andrew J Todd

List of Publications by Year
in descending order

95 papers	7,430 citations	61984 43 h-index	56724 83 g-index
100 all docs	100 docs citations	100 times ranked	4905 citing authors

#	Article	IF	Citations
1	Neuronal circuitry for pain processing in the dorsal horn. Nature Reviews Neuroscience, 2010, 11, 823-836.	10.2	1,112
2	Light microscope study of the coexistence of GABA-like and glycine-like immunoreactivities in the spinal cord of the rat. Journal of Comparative Neurology, 1990, 296, 496-505.	1.6	466
3	Dynorphin Acts as a Neuromodulator to Inhibit Itch in the Dorsal Horn of the Spinal Cord. Neuron, 2014, 82, 573-586.	8.1	290
4	Populations of inhibitory and excitatory interneurons in lamina II of the adult rat spinal dorsal horn revealed by a combined electrophysiological and anatomical approach. Pain, 2010, 151, 475-488.	4.2	274
5	Spinal cholinergic interneurons regulate the excitability of motoneurons during locomotion. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 2448-2453.	7.1	264
6	Neurokinin 1 receptor expression by neurons in laminae I, III and IV of the rat spinal dorsal horn that project to the brainstem. European Journal of Neuroscience, 2000, 12, 689-700.	2.6	255
7	Conditional Rhythmicity of Ventral Spinal Interneurons Defined by Expression of the Hb9 Homeodomain Protein. Journal of Neuroscience, 2005, 25, 5710-5719.	3.6	225
8	Postnatal phenotype and localization of spinal cord V1 derived interneurons. Journal of Comparative Neurology, 2005, 493, 177-192.	1.6	204
9	Circuit dissection of the role of somatostatin in itch and pain. Nature Neuroscience, 2018, 21, 707-716.	14.8	195
10	Projection Neurons in Lamina I of Rat Spinal Cord with the Neurokinin 1 Receptor Are Selectively Innervated by Substance P-Containing Afferents and Respond to Noxious Stimulation. Journal of Neuroscience, 2002, 22, 4103-4113.	3.6	189
11	Coexistence of NADPH diaphorase with GABA, glycine, and acetylcholine in rat spinal cord. Journal of Comparative Neurology, 1993, 335, 320-333.	1.6	163
12	Identifying functional populations among the interneurons in laminae I-III of the spinal dorsal horn. Molecular Pain, 2017, 13, 174480691769300.	2.1	156
13	Locomotor-Like Rhythms in a Genetically Distinct Cluster of Interneurons in the Mammalian Spinal Cord. Journal of Neurophysiology, 2005, 93, 1439-1449.	1.8	149
14	Cells in Laminae III and IV of the Rat Spinal Cord that Possess the Neurokinin-1 Receptor and Have Dorsally Directed Dendrites Receive a Major Synaptic Input from Tachykinin-Containing Primary Afferents. Journal of Neuroscience, 1997, 17, 5536-5548.	3.6	131
15	Loss of Neurons from Laminas I-III of the Spinal Dorsal Horn Is Not Required for Development of Tactile Allodynia in the Spared Nerve Injury Model of Neuropathic Pain. Journal of Neuroscience, 2005, 25, 6658-6666.	3.6	129
16	Synaptic distribution of the NR1, NR2A and NR2B subunits of the N-methyl-d-aspartate receptor in the rat lumbar spinal cord revealed with an antigen-unmasking technique. European Journal of Neuroscience, 2004, 20, 3301-3312.	2.6	128
17	Anti-disialoside antibodies kill perisynaptic Schwann cells and damage motor nerve terminals via membrane attack complex in a murine model of neuropathy. Brain, 2004, 127, 2109-2123.	7.6	122
18	The organisation of spinoparabrachial neurons in the mouse. Pain, 2015, 156, 2061-2071.	4.2	119

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19	Immune or Genetic-Mediated Disruption of CASPR2 Causes Pain Hypersensitivity Due to Enhanced Primary Afferent Excitability. Neuron, 2018, 97, 806-822.e10.	8.1	119
20	Widespread Expression of the AMPA Receptor GluR2 Subunit at Glutamatergic Synapses in the Rat Spinal Cord and Phosphorylation of GluR1 in Response to Noxious Stimulation Revealed with an Antigen-Unmasking Method. Journal of Neuroscience, 2004, 24, 5766-5777.	3.6	113
21	Lack of Evidence for Sprouting of AÎ² Afferents into the Superficial Laminas of the Spinal Cord Dorsal Horn after Nerve Section. Journal of Neuroscience, 2003, 23, 9491-9499.	3.6	112
22	GABA-like immunoreactivity in type I glomeruli of rat substantia gelatinosa. Brain Research, 1990, 514, 171-174.	2.2	103
23	A Quantitative Study of Inhibitory Interneurons in Laminae I-III of the Mouse Spinal Dorsal Horn. PLoS ONE, 2013, 8, e78309.	2.5	100
24	GABAergic Neurons that Contain Neuropeptide Y Selectively Target Cells with the Neurokinin 1 Receptor in Laminae III and IV of the Rat Spinal Cord. Journal of Neuroscience, 1999, 19, 2637-2646.	3.6	97
25	Collateral projections of neurons in laminae I, III, and IV of rat spinal cord to thalamus, periaqueductal gray matter, and lateral parabrachial area. Journal of Comparative Neurology, 2009, 515, 629-646.	1.6	94
26	Presynaptically Localized Cyclic GMP-Dependent Protein Kinase 1 Is a Key Determinant of Spinal Synaptic Potentiation and Pain Hypersensitivity. PLoS Biology, 2012, 10, e1001283.	5.6	82
27	Functional differences between neurochemically defined populations of inhibitory interneurons in the rat spinal dorsal horn. Pain, 2013, 154, 2606-2615.	4.2	77
28	Recent advances in our understanding of the organization of dorsal horn neuron populations and their contribution to cutaneous mechanical allodynia. Journal of Neural Transmission, 2020, 127, 505-525.	2.8	74
29	A quantitative study of spinothalamic neurons in laminae I, III, and IV in lumbar and cervical segments of the rat spinal cord. Journal of Comparative Neurology, 2008, 511, 1-18.	1.6	71
30	A quantitative study of neurochemically defined excitatory interneuron populations in laminae Iâ€"III of the mouse spinal cord. Molecular Pain, 2016, 12, 174480691662906.	2.1	70
31	A quantitative study of neurochemically defined populations of inhibitory interneurons in the superficial dorsal horn of the mouse spinal cord. Neuroscience, 2017, 363, 120-133.	2.3	68
32	Dynorphin is Expressed Primarily by GABAergic Neurons That Contain Galanin in the Rat Dorsal Horn. Molecular Pain, 2011, 7, 1744-8069-7-76.	2.1	67
33	Expression of AMPA Receptor Subunits at Synapses in Laminae Iâ€"III of the Rodent Spinal Dorsal Horn. Molecular Pain, 2008, 4, 1744-8069-4-5.	2.1	66
34	Morphological and functional properties distinguish the substance P and gastrin-releasing peptide subsets of excitatory interneuron in the spinal cord dorsal horn. Pain, 2019, 160, 442-462.	4.2	59
35	Preprotachykinin A is expressed by a distinct population of excitatory neurons in the mouse superficial spinal dorsal horn including cells that respond to noxious and pruritic stimuli. Pain, 2017, 158, 440-456.	4.2	58
36	Quantitative study of NPYâ€expressing GABAergic neurons and axons in rat spinal dorsal horn. Journal of Comparative Neurology, 2011, 519, 1007-1023.	1.6	57

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37	Central Nervous System Targets: Inhibitory Interneurons in the Spinal Cord. Neurotherapeutics, 2020, 17, 874-885.	4.4	56
38	Galanin-Immunoreactivity Identifies a Distinct Population of Inhibitory Interneurons in Laminae I-III of the Rat Spinal Cord. Molecular Pain, 2011, 7, 1744-8069-7-36.	2.1	55
39	Peripheral calcium-permeable AMPA receptors regulate chronic inflammatory pain in mice. Journal of Clinical Investigation, 2011, 121, 1608-1623.	8.2	53
40	Light and electron microscope study of GABA-immunoreactive neurones in Lamina III of rat spinal cord. Journal of Comparative Neurology, 1992, 315, 125-136.	1.6	52
41	Peripheral axotomy induces depletion of the vesicular glutamate transporter VGLUT1 in central terminals of myelinated afferent fibres in the rat spinal cord. Brain Research, 2004, 1017, 69-76.	2.2	52
42	A quantitative study of brainstem projections from lamina I neurons in the cervical and lumbar enlargement of the rat. Brain Research, 2010, 1308, 58-67.	2.2	52
43	Electron microscope study of Golgi-stained cells in lamina II of the rat spinal dorsal horn. Journal of Comparative Neurology, 1988, 275, 145-157.	1.6	49
44	Large Projection Neurons in Lamina I of the Rat Spinal Cord That Lack the Neurokinin 1 Receptor Are Densely Innervated by VGLUT2-Containing Axons and Possess GluR4-Containing AMPA Receptors. Journal of Neuroscience, 2008, 28, 13150-13160.	3.6	47
45	Expression of Gastrin-Releasing Peptide by Excitatory Interneurons in the Mouse Superficial Dorsal Horn. Molecular Pain, 2014, 10, 1744-8069-10-79.	2.1	44
46	A Putative Relay Circuit Providing Low-Threshold Mechanoreceptive Input to Lamina I Projection Neurons via Vertical Cells in Lamina II of the Rat Dorsal Horn. Molecular Pain, 2014, 10, 1744-8069-10-3.	2.1	44
47	Survival of syngeneic and allogeneic iPSCâ€“derived neural precursors after spinal grafting in minipigs. Science Translational Medicine, 2018, 10, .	12.4	42
48	The Recurrent Case for the Renshaw Cell. Journal of Neuroscience, 2014, 34, 12919-12932.	3.6	40
49	Immunostaining for Homer reveals the majority of excitatory synapses in laminae Iâ€“III of the mouse spinal dorsal horn. Neuroscience, 2016, 329, 171-181.	2.3	40
50	Phosphorylation of ERK in Neurokinin 1 Receptor-Expressing Neurons in Laminae III and IV of the Rat Spinal Dorsal Horn Following Noxious Stimulation. Molecular Pain, 2007, 3, 1744-8069-3-4.	2.1	39
51	Cells in laminae III and IV of rat spinal dorsal horn receive monosynaptic primary afferent input in lamina II. Journal of Comparative Neurology, 1989, 289, 676-686.	1.6	38
52	Plasticity of Inhibition in the Spinal Cord. Handbook of Experimental Pharmacology, 2015, 227, 171-190.	1.8	38
53	Expression of cholecystokinin by neurons in mouse spinal dorsal horn. Journal of Comparative Neurology, 2019, 527, 1857-1871.	1.6	38
54	Upregulation of Substance P in Low-Threshold Myelinated Afferents Is Not Required for Tactile Allodynia in the Chronic Constriction Injury and Spinal Nerve Ligation Models. Journal of Neuroscience, 2007, 27, 2035-2044.	3.6	36

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55	Axon diversity of lamina I localâ€circuit neurons in the lumbar spinal cord. Journal of Comparative Neurology, 2013, 521, 2719-2741.	1.6	35
56	A combined electrophysiological and morphological study of neuropeptide Yâ€"expressing inhibitory interneurons in the spinal dorsal horn of the mouse. Pain, 2016, 157, 598-612.	4.2	34
57	Inhibitory Interneurons That Express GFP in the<i>PrP-GFP</i>Mouse Spinal Cord Are Morphologically Heterogeneous, Innervated by Several Classes of Primary Afferent and Include Lamina I Projection Neurons among Their Postsynaptic Targets. Journal of Neuroscience, 2015, 35, 7626-7642.	3.6	33
58	Neuroanatomical substrates of spinal nociception. , 2006, , 73-90.		33
59	Projection Neurons in Lamina III of the Rat Spinal Cord Are Selectively Innervated by Local Dynorphin-Containing Excitatory Neurons. Journal of Neuroscience, 2012, 32, 11854-11863.	3.6	31
60	GÎ±q/11 signaling tonically modulates nociceptor function and contributes to activity-dependent sensitization. Pain, 2012, 153, 184-196.	4.2	31
61	Do central terminals of intact myelinated primary afferents sprout into the superficial dorsal horn of rat spinal cord after injury to a neighboring peripheral nerve?. Journal of Comparative Neurology, 2004, 474, 427-437.	1.6	30
62	Spinal neurons that contain gastrin-releasing peptide seldom express Fos or phosphorylate extracellular signal-regulated kinases in response to intradermal chloroquine. Molecular Pain, 2016, 12, 174480691664960.	2.1	26
63	Expression of Calretinin Among Different Neurochemical Classes of Interneuron in the Superficial Dorsal Horn of the Mouse Spinal Cord. Neuroscience, 2019, 398, 171-181.	2.3	26
64	Neurochemical Characterisation of Lamina II Inhibitory Interneurons that Express GFP in the PrP-GFP Mouse. Molecular Pain, 2013, 9, 1744-8069-9-56.	2.1	23
65	Expression of Neuropeptide FF Defines a Population of Excitatory Interneurons in the Superficial Dorsal Horn of the Mouse Spinal Cord that Respond to Noxious and Pruritic Stimuli. Neuroscience, 2019, 416, 281-293.	2.3	21
66	Encoding of cutaneous stimuli by lamina I projection neurons. Pain, 2021, 162, 2405-2417.	4.2	21
67	Evidence against AMPA Receptor-Lacking Glutamatergic Synapses in the Superficial Dorsal Horn of the Rat Spinal Cord. Journal of Neuroscience, 2009, 29, 13401-13409.	3.6	20
68	Substance P-expressing excitatory interneurons in the mouse superficial dorsal horn provide a propriospinal input to the lateral spinal nucleus. Brain Structure and Function, 2018, 223, 2377-2392.	2.3	20
69	Expression of green fluorescent protein defines a specific population of lamina II excitatory interneurons in the GRP::eGFP mouse. Scientific Reports, 2020, 10, 13176.	3.3	20
70	A population of large neurons in laminae III and IV of the rat spinal cord that have long dorsal dendrites and lack the neurokinin 1 receptor. European Journal of Neuroscience, 2007, 26, 1587-1598.	2.6	15
71	Neurokinin 1 receptorâ€expressing projection neurons in laminae III and IV of the rat spinal cord have synaptic AMPA receptors that contain GluR2, GluR3 and GluR4 subunits. European Journal of Neuroscience, 2009, 29, 718-726.	2.6	15
72	Grpr expression defines a population of superficial dorsal horn vertical cells that have a role in both itch and pain. Pain, 2023, 164, 149-170.	4.2	15

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73	Insight into B5-I spinal interneurons and their role in the inhibition of itch and pain. Pain, 2016, 157, 544-545.	4.2	14
74	Substance P-expressing Neurons in the Superficial Dorsal Horn of the Mouse Spinal Cord: Insights into Their Functions and their Roles in Synaptic Circuits. Neuroscience, 2020, 450, 113-125.	2.3	13
75	Characterisation of lamina I anterolateral system neurons that express Cre in a Phox2a-Cre mouse line. Scientific Reports, 2021, 11, 17912.	3.3	11
76	Chapter 6 Anatomy and neurochemistry of the dorsal horn. Handbook of Clinical Neurology / Edited By P J Vinken and G W Bruyn, 2006, 81, 61-76.	1.8	10
77	Ablation of spinal cord estrogen receptor Î±â€expressing interneurons reduces chemically induced modalities of pain and itch. Journal of Comparative Neurology, 2020, 528, 1629-1643.	1.6	10
78	Selective innervation of NK1 receptorâ€“lacking lamina I spinoparabrachial neurons by presumed nonpeptidergic AÎ´ nociceptors in the rat. Pain, 2014, 155, 2291-2300.	4.2	9
79	Anatomical evidence for an anticonvulsant relay in the rat ventromedial medulla. European Journal of Neuroscience, 2005, 22, 1431-1444.	2.6	8
80	Serotoninergic-mediated inhibition of substance P sensitive deep dorsal horn neurons: a combined electrophysiological and morphological study in vitro. Experimental Brain Research, 2005, 160, 360-367.	1.5	7
81	Studying independent Kcna6 knock-out mice reveals toxicity of exogenous LacZ to central nociceptor terminals and differential effects of Kv1.6 on acute and neuropathic pain sensation. Journal of Neuroscience, 2021, 41, JN-RM-0187-21.	3.6	5
82	How to recognise collateral damage in partial nerve injury models of neuropathic pain. Pain, 2012, 153, 11-12.	4.2	2
83	Central Nervous System Pain Pathways. , 0, , 415-444.		2
84	GABAA and Glycine Receptor-Mediated Inhibitory Synaptic Transmission onto Adult Rat Lamina Ili PKCÎ³-Interneurons: Pharmacological but Not Anatomical Specialization. Cells, 2022, 11, 1356.	4.1	2
85	Dorsal root recurrent collaterals in young cats. Brain Research, 1981, 221, 371-373.	2.2	1
86	A quantitative study of spinothalamic neurons in laminae I, III, and IV in lumbar and cervical segments of the rat spinal cord. Journal of Comparative Neurology, 2008, 511, spc1-spc1.	1.6	1
87	Neuronal circuitry for pain processing in the dorsal horn. , 0, .		1
88	An Historical Perspective: The Second Order Neuron in the Pain Pathway. Frontiers in Pain Research, 2022, 3, 845211.	2.0	1
89	Anatomical Changes in the Spinal Dorsal Horn after Peripheral Nerve Injury. , 2007, , 309-324.		0
90	A quantitative study of spinothalamic neurons in laminae I, III, and IV in lumbar and cervical segments of the rat spinal cord. Journal of Comparative Neurology, 2008, 511, spc1-spc1.	1.6	0

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91	Quantitative study of NPY-expressing GABAergic neurons and axons in rat spinal dorsal horn. Journal of Comparative Neurology, 2011, 519, spc1-spc1.	1.6	0
92	Sustratos neuroanatÃ³micos de la nocicepciÃ³n medular. , 2007, , 73-90.		0
93	Changes in NK1 and Glutamate Receptors in Pain. , 2009, , 3-19.		0
94	Functional Populations Among Interneurons in the Dorsal Horn. , 2020, , 207-219.		0
95	Confocal Imaging of Nerve Cells and Their Connections. , 2002, , 259-272.		0