Allan Basbaum

List of Publications by Year
in descending order

129 papers	28,550 citations	18436 62 h-index	18075 120 g-index
142 all docs	142 docs citations	142 times ranked	18234 citing authors

#	Article	IF	Citations
1	Cellular and Molecular Mechanisms of Pain. Cell, 2009, 139, 267-284.	13.5	3,090
2	The Cloned Capsaicin Receptor Integrates Multiple Pain-Producing Stimuli. Neuron, 1998, 21, 531-543.	3.8	2,792
3	Molecular mechanisms of nociception. Nature, 2001, 413, 203-210.	13.7	2,141
4	TRPA1 Mediates the Inflammatory Actions of Environmental Irritants and Proalgesic Agents. Cell, 2006, 124, 1269-1282.	13.5	1,672
5	Bradykinin and nerve growth factor release the capsaicin receptor from PtdIns(4,5)P2-mediated inhibition. Nature, 2001, 411, 957-962.	13.7	1,144
6	Endogenous pain control mechanisms: Review and hypothesis. Annals of Neurology, 1978, 4, 451-462.	2.8	1,133
7	The menthol receptor TRPM8 is the principal detector of environmental cold. Nature, 2007, 448, 204-208.	13.7	1,110
8	4-Hydroxynonenal, an endogenous aldehyde, causes pain and neurogenic inflammation through activation of the irritant receptor TRPA1. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 13519-13524.	3.3	655
9	Preserved Acute Pain and Reduced Neuropathic Pain in Mice Lacking PKC. Science, 1997, 278, 279-283.	6.0	645
10	Three bulbospinal pathways from the rostral medulla of the cat: An autoradiographic study of pain modulating systems. Journal of Comparative Neurology, 1978, 178, 209-224.	0.9	628
11	The origin of descending pathways in the dorsolateral funiculus of the spinal cord of the cat and rat: Further studies on the anatomy of pain modulation. Journal of Comparative Neurology, 1979, 187, 513-531.	0.9	602
12	Distinct subsets of unmyelinated primary sensory fibers mediate behavioral responses to noxious thermal and mechanical stimuli. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 9075-9080.	3.3	581
13	Primary afferent tachykinins are required to experience moderate to intense pain. Nature, 1998, 392, 390-394.	13.7	560
14	A sensory neuronâ€“expressed IL-31 receptor mediates TÂhelper cellâ€“dependent itch: Involvement of TRPV1 andÂTRPA1. Journal of Allergy and Clinical Immunology, 2014, 133, 448-460.e7.	1.5	556
15	Expression of c-fosprotein in interneurons and projection neurons of the rat spinal cord in response to noxious somatic, articular, and visceral stimulation. Journal of Comparative Neurology, 1989, 285, 177-195.	0.9	484
16	Injured sensory neuronâ€“derived CSF1 induces microglial proliferation and DAP12-dependent pain. Nature Neuroscience, 2016, 19, 94-101.	7.1	421
17	Dissociation of the Opioid Receptor Mechanisms that Control Mechanical and Heat Pain. Cell, 2009, 137, 1148-1159.	13.5	410
18	NMDA-receptor regulation of substance P release from primary afferent nociceptors. Nature, 1997, 386, 721-724.	13.7	408

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19	Injury-induced mechanical hypersensitivity requires C-low threshold mechanoreceptors. Nature, 2009, 462, 651-655.	13.7	392
20	TRPV1-expressing primary afferents generate behavioral responses to pruritogens via multiple mechanisms. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 11330-11335.	3.3	386
21	Transmitting Pain and Itch Messages: A Contemporary View of the Spinal Cord Circuits that Generate Gate Control. Neuron, 2014, 82, 522-536.	3.8	355
22	Immunohistochemical localization of GABAB receptors in the rat central nervous system. , 1999, 405, 299-321.		312
23	Differential origins of spinothalamic tract projections to medial and lateral thalamus in the rat. Journal of Comparative Neurology, 1979, 184, 107-125.	0.9	299
24	A heteromeric Texas coral snake toxin targets acid-sensing ion channels to produce pain. Nature, 2011, 479, 410-414.	13.7	295
25	Dorsal root ganglion macrophages contribute to both the initiation and persistence of neuropathic pain. Nature Communications, 2020, 11, 264.	5.8	286
26	Reversal of morphine and stimulus-produced analgesia by subtotal spinal cord lesions. Pain, 1977, 3, 43-56.	2.0	285
27	Parallel â€œPainâ€• Pathways Arise from Subpopulations of Primary Afferent Nociceptor. Neuron, 2005, 47, 787-793.	3.8	274
28	Spared nerve injury model of neuropathic pain in the mouse: a behavioral and anatomic analysis. Journal of Pain, 2003, 4, 465-470.	0.7	252
29	Dorsal Horn Parvalbumin Neurons Are Gate-Keepers of Touch-Evoked Pain after Nerve Injury. Cell Reports, 2015, 13, 1246-1257.	2.9	248
30	Selective spider toxins reveal a role for the Nav1.1 channel in mechanical pain. Nature, 2016, 534, 494-499.	13.7	239
31	Morphological characterization of substance P receptor-immunoreactive neurons in the rat spinal cord and trigeminal nucleus caudalis. Journal of Comparative Neurology, 1995, 356, 327-344.	0.9	238
32	Restriction of Transient Receptor Potential Vanilloid-1 to the Peptidergic Subset of Primary Afferent Neurons Follows Its Developmental Downregulation in Nonpeptidergic Neurons. Journal of Neuroscience, 2011, 31, 10119-10127.	1.7	223
33	Transneuronal Labeling of a Nociceptive Pathway, the Spino-(Trigemino-)Parabrachio-Amygdaloid, in the Rat. Journal of Neuroscience, 1997, 17, 3751-3765.	1.7	211
34	Morphine or U-50,488 suppresses fos protein-like immunoreactivity in the spinal cord and nucleus tractus solitarii evoked by a noxious visceral stimulus in the rat. Journal of Comparative Neurology, 1992, 315, 244-253.	0.9	205
35	The Origin of Brainstem Noradrenergic and Serotonergic Projections to the Spinal Cord Dorsal Horn in the Rat. Somatosensory & Motor Research, 1992, 9, 157-173.	0.4	203
36	Forebrain GABAergic Neuron Precursors Integrate into Adult Spinal Cord and Reduce Injury-Induced Neuropathic Pain. Neuron, 2012, 74, 663-675.	3.8	190

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37	Interneurons from Embryonic Development to Cell-Based Therapy. Science, 2014, 344, 1240622.	6.0	162
38	Innocuous, Not Noxious, Input Activates PKCÎ³ Interneurons of the Spinal Dorsal Horn via Myelinated Afferent Fibers. Journal of Neuroscience, 2008, 28, 7936-7944.	1.7	158
39	Behavioral indices of ongoing pain are largely unchanged in male mice with tissue or nerve injury-induced mechanical hypersensitivity. Pain, 2011, 152, 990-1000.	2.0	154
40	Contribution of brainstem GABAergic circuitry to descending antinociceptive controls: I. GABA-immunoreactive projection neurons in the periaqueductal gray and nucleus raphe magnus. Journal of Comparative Neurology, 1990, 302, 370-377.	0.9	152
41	Pain Genes?: Natural Variation and Transgenic Mutants. Annual Review of Neuroscience, 2000, 23, 777-811.	5.0	148
42	Differential ATF3 expression in dorsal root ganglion neurons reveals the profile of primary afferents engaged by diverse noxious chemical stimuli. Pain, 2010, 150, 290-301.	2.0	136
43	Multiple opioid peptides and the modulation of pain: Immunohistochemical analysis of dynorphin and enkephalin in the trigeminal nucleus caudalis and spinal cord of the cat. Journal of Comparative Neurology, 1985, 240, 331-348.	0.9	127
44	Delta Opioid Receptors Presynaptically Regulate Cutaneous Mechanosensory Neuron Input to the Spinal Cord Dorsal Horn. Neuron, 2014, 81, 1312-1327.	3.8	127
45	Powerful antinociceptive effects of the cone snail venom-derived subtype-selective NMDA receptor antagonists conantokins G and T. Pain, 2003, 101, 109-116.	2.0	120
46	Excitatory Superficial Dorsal Horn Interneurons Are Functionally Heterogeneous and Required for the Full Behavioral Expression of Pain and Itch. Neuron, 2013, 78, 312-324.	3.8	118
47	Functional Divergence of Delta and Mu Opioid Receptor Organization in CNS Pain Circuits. Neuron, 2018, 98, 90-108.e5.	3.8	118
48	Pain behavior in the formalin test persists after ablation of the great majority of C-fiber nociceptors. Pain, 2010, 151, 422-429.	2.0	116
49	TMEM16C facilitates Na+-activated K+ currents in rat sensory neurons and regulates pain processing. Nature Neuroscience, 2013, 16, 1284-1290.	7.1	115
50	Structures of the Ïƒ2 receptor enable docking for bioactive ligand discovery. Nature, 2021, 600, 759-764.	13.7	113
51	Microcircuit Mechanisms through which Mediodorsal Thalamic Input to Anterior Cingulate Cortex Exacerbates Pain-Related Aversion. Neuron, 2019, 102, 944-959.e3.	3.8	106
52	Effects of central lesions on disorders produced by multiple dorsal rhizotomy in rats. Experimental Neurology, 1974, 42, 490-501.	2.0	101
53	VGLUT2 expression in primary afferent neurons is essential for normal acute pain and injury-induced heat hypersensitivity. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 22296-22301.	3.3	98
54	Transneuronal tracing of diverse CNS circuits by Cre-mediated induction of wheat germ agglutinin in transgenic mice. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 15148-15153.	3.3	91

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55	Immunoreactive Vasoactive Intestinal Polypeptide Is Concentrated in the Sacral Spinal Cord: A Possible Marker for Pelvic Visceral Afferent Fibers. Somatosensory & Motor Research, 1983, 1, 69-82.	2.2	88
56	Contribution of Î±2 receptor subtypes to nerve injury-induced pain and its regulation by dexmedetomidine. British Journal of Pharmacology, 2001, 132, 1827-1836.	2.7	88
57	Primary Afferent and Spinal Cord Expression of Gastrin-Releasing Peptide: Message, Protein, and Antibody Concerns. Journal of Neuroscience, 2015, 35, 648-657.	1.7	83
58	Anatomical and functional analysis of aquaporin 1, a water channel in primary afferent neurons. Pain, 2007, 131, 8-20.	2.0	81
59	A locus and mechanism of action for associative morphine tolerance. Nature Neuroscience, 2000, 3, 47-53.	7.1	79
60	TrkB Signaling Is Required for Both the Induction and Maintenance of Tissue and Nerve Injury-Induced Persistent Pain. Journal of Neuroscience, 2009, 29, 5508-5515.	1.7	77
61	Contribution of brainstem GABAergic circuitry to descending antinociceptive controls: II. Electron microscopic immunocytochemical evidence of gabaergic control over the projection from the periaqueductal gray to the nucleus raphe magnus in the rat. Journal of Comparative Neurology, 1990, 302, 378-393.	0.9	75
62	Spinal Opioid Analgesia: How Critical Is the Regulation of Substance P Signaling?. Journal of Neuroscience, 1999, 19, 9642-9653.	1.7	74
63	Convergent neural representations of experimentally-induced acute pain in healthy volunteers: A large-scale fMRI meta-analysis. Neuroscience and Biobehavioral Reviews, 2020, 112, 300-323.	2.9	66
64	Distribution of glycine receptor immunoreactivity in the spinal cord of the rat: Cytochemical evidence for a differential glycinergic control of lamina I and V nociceptive neurons. Journal of Comparative Neurology, 1988, 278, 330-336.	0.9	64
65	Transplant-mediated enhancement of spinal cord GABAergic inhibition reverses paclitaxel-induced mechanical and heat hypersensitivity. Pain, 2015, 156, 1084-1091.	2.0	64
66	Immunoreactive Glutamic Acid Decarboxylase in the Trigeminal Nucleus Caudalis of the Cat: A Light- and Electron-Microscopic Analysis. Somatosensory & Motor Research, 1986, 4, 77-94.	2.2	62
67	Bulbospinal projections in the primate: A light and electron microscopic study of a pain modulating system. Journal of Comparative Neurology, 1986, 250, 311-323.	0.9	60
68	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.	2.0	59
69	Ultrastructural analysis of dynorphin B-immunoreactive cells and terminals in the superficial dorsal horn of the deafferented spinal cord of the rat. Journal of Comparative Neurology, 1989, 281, 193-205.	0.9	57
70	Genetically expressed transneuronal tracer reveals direct and indirect serotonergic descending control circuits. Journal of Comparative Neurology, 2008, 507, 1990-2003.	0.9	57
71	The modalityâ€specific contribution of peptidergic and nonâ€peptidergic nociceptors is manifest at the level of dorsal horn nociresponsive neurons. Journal of Physiology, 2013, 591, 1097-1110.	1.3	57
72	GABAergic circuitry in the rostral ventral medulla of the rat and its relationship to descending antinociceptive controls. Journal of Comparative Neurology, 1991, 303, 316-328.	0.9	56

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73	Inputs to serotonergic neurons revealed by conditional viral transneuronal tracing. Journal of Comparative Neurology, 2009, 514, 145-160.	0.9	56
74	Profound reduction of somatic and visceral pain in mice by intrathecal administration of the anti-migraine drug, sumatriptan. Pain, 2008, 139, 533-540.	2.0	51
75	GABAergic cell transplants in the anterior cingulate cortex reduce neuropathic pain aversiveness. Brain, 2019, 142, 2655-2669.	3.7	49
76	Spinal cord projection neurons: a superficial, and also deep analysis. Current Opinion in Physiology, 2019, 11, 109-115.	0.9	47
77	The Fiber Caliber of 5-HT Immunoreactive Axons in the Dorsolateral Funiculus of the Spinal Cord of the Rat and Cat. Somatosensory & Motor Research, 1988, 5, 177-185.	2.2	43
78	Transplant restoration of spinal cord inhibitory controls ameliorates neuropathic itch. Journal of Clinical Investigation, 2014, 124, 3612-3616.	3.9	43
79	CT-guided injection of a TRPV1 agonist around dorsal root ganglia decreases pain transmission in swine. Science Translational Medicine, 2015, 7, 305ra145.	5.8	42
80	Regulatory T-cells inhibit microglia-induced pain hypersensitivity in female mice. ELife, 2021, 10, .	2.8	41
81	Insights into the development of opioid tolerance. Pain, 1995, 61, 349-352.	2.0	37
82	Lys49 myotoxin from the Brazilian lancehead pit viper elicits pain through regulated ATP release. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E2524-E2532.	3.3	37
83	Functional Synaptic Integration of Forebrain GABAergic Precursors into the Adult Spinal Cord. Journal of Neuroscience, 2016, 36, 11634-11645.	1.7	36
84	NaV1.1 inhibition can reduce visceral hypersensitivity. JCI Insight, 2018, 3, .	2.3	34
85	Simultaneous Measurement of Extracellular Morphine and Serotonin in Brain Tissue and CSF by Microdialysis in Awake Rats. Journal of Neurochemistry, 1992, 58, 1773-1781.	2.1	31
86	Synergistic antipruritic effects of gamma aminobutyric acid AÂand B agonists in a mouse model of atopic dermatitis. Journal of Allergy and Clinical Immunology, 2017, 140, 454-464.e2.	1.5	31
87	Immunoreactive pro-enkephalin and pro-dynorphin products are differentially distributed within the nucleus of the solitary tract of the rat. Journal of Comparative Neurology, 1984, 230, 614-619.	0.9	30
88	Neurochemical Characterization of Extracellular Serotonin in the Rostral Ventromedial Medulla and Its Modulation by Noxious Stimuli. Journal of Neurochemistry, 1995, 65, 578-589.	2.1	29
89	Primary Afferent-Derived BDNF Contributes Minimally to the Processing of Pain and Itch. ENeuro, 2018, 5, ENEURO.0402-18.2018.	0.9	29
90	Contribution of colony-stimulating factor 1 to neuropathic pain. Pain Reports, 2021, 6, e883.	1.4	27

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91	Peripheral and central neuronal ATF3 precedes CD4+ T-cell infiltration in EAE. Experimental Neurology, 2016, 283, 224-234.	2.0	24
92	Pain and itch processing by subpopulations of molecularly diverse spinal and trigeminal projection neurons. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	24
93	Toward Better Pain Control. Scientific American, 2006, 294, 60-67.	1.0	23
94	Cell transplants to treat the â€œdiseaseâ€•of neuropathic pain and itch. Pain, 2016, 157, S42-S47.	2.0	22
95	GABA-immunoreactive boutons contact identified OFF and ON cells in the nucleus raphe magnus. Journal of Comparative Neurology, 1997, 378, 196-204.	0.9	20
96	Contribution of the Reelin signaling pathways to nociceptive processing. European Journal of Neuroscience, 2008, 27, 523-537.	1.2	20
97	Contribution of dorsal horn CGRP-expressing interneurons to mechanical sensitivity. ELife, 2021, 10, .	2.8	20
98	Longâ€term, dynamic synaptic reorganization after GABAergic precursor cell transplantation into adult mouse spinal cord. Journal of Comparative Neurology, 2018, 526, 480-495.	0.9	19
99	Pain relief by supraspinal gabapentin requires descending noradrenergic inhibitory controls. Pain Reports, 2018, 3, e659.	1.4	19
100	Targeting Pain Where It Resides â€¦ In the Brain. Science Translational Medicine, 2011, 3, 65ps1.	5.8	18
101	GABAergic regulation of noradrenergic spinal projection neurons of the A5 cell group in the rat: An electron microscopic analysis. Journal of Comparative Neurology, 1993, 330, 557-570.	0.9	17
102	Structure-Based Design of a Chemical Probe Set for the 5-HT_{5A} Serotonin Receptor. Journal of Medicinal Chemistry, 2022, 65, 4201-4217.	2.9	17
103	Sciatic nerve transection triggers release and intercellular transfer of a genetically expressed macromolecular tracer in dorsal root ganglia. Journal of Comparative Neurology, 2011, 519, 2648-2657.	0.9	15
104	Pain physiology: basic science. Canadian Journal of Anaesthesia, 2002, 49, R1-R3.	0.7	14
105	Olfactory ensheathing glia express aquaporin 1. Journal of Comparative Neurology, 2010, 518, 4329-4341.	0.9	14
106	Genetic priming of sensory neurons in mice that overexpress PAR2 enhances allergen responsiveness. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	14
107	A New Way to Lose Your Nerve. Science of Aging Knowledge Environment: SAGE KE, 2004, 2004, pe15-pe15.	0.9	13
108	Brain Responses to Noxious Stimuli in Patients With Chronic Pain. JAMA Network Open, 2021, 4, e2032236.	2.8	12

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109	Neuronal aromatase expression in pain processing regions of the medullary and spinal cord dorsal horn. Journal of Comparative Neurology, 2017, 525, 3414-3428.	0.9	10
110	Rebuilding CNS inhibitory circuits to control chronic neuropathic pain and itch. Progress in Brain Research, 2017, 231, 87-105.	0.9	10
111	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.	0.9	10
112	TMEM16C is involved in thermoregulation and protects rodent pups from febrile seizures. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, e2023342118.	3.3	8
113	Mice Lacking Serotonin 2C Receptors Have increased Affective Responses to Aversive Stimuli. PLoS ONE, 2015, 10, e0142906.	1.1	8
114	Structural imaging studies of patients with chronic pain: an anatomical likelihood estimate meta-analysis. Pain, 2023, 164, e10-e24.	2.0	8
115	Hippocalcin-like 4, a neural calcium sensor, has a limited contribution to pain and itch processing. PLoS ONE, 2020, 15, e0226289.	1.1	6
116	History of Spinal Cord â€œPainâ€•Pathways Including the Pathways Not Taken. Frontiers in Pain Research, 0, 3, .	0.9	5
117	Presynaptic Inputs to Any CNS Projection Neuron Identified by Dual Recombinant Virus Infection. PLoS ONE, 2015, 10, e0140681.	1.1	4
118	Reviews: Topical, systematic and once again, comprehensive. Pain, 2006, 124, 237.	2.0	3
119	An ACVR1 activating mutation causes neuropathic pain and sensory neuron hyperexcitability in humans. Pain, 2022, Publish Ahead of Print, .	2.0	3
120	Presynaptic control of nociceptor signalling: Differential influence of Mu Opioid and GABAergic Systems. Pain Research and Management, 2000, 5, 185-196.	0.7	2
121	Mispositioned Neurokinin-1 Receptor-Expressing Neurons Underlie Heat Hyperalgesia in<i>Disabled-1</i>Mutant Mice. ENeuro, 2019, 6, ENEURO.0131-19.2019.	0.9	2
122	Basic Mechanisms and Pathophysiology. , 2010, , 14-23.		1
123	Hospital merger leaves clinical science intact. Nature, 1999, 401, 842-842.	13.7	0
124	In Memoriam Jeanâ€Marie Besson 1938â€“2014. European Journal of Pain, 2015, 19, 871-876.	1.4	0
125	Chemogenetic management of neuropathic pain. Brain, 2017, 140, 2522-2525.	3.7	0
126	Hippocalcin-like 4, a neural calcium sensor, has a limited contribution to pain and itch processing. , 2020, 15, e0226289.		0

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127	Hippocalcin-like 4, a neural calcium sensor, has a limited contribution to pain and itch processing. , 2020, 15, e0226289.		0
128	Hippocalcin-like 4, a neural calcium sensor, has a limited contribution to pain and itch processing. , 2020, 15, e0226289.		0
129	Hippocalcin-like 4, a neural calcium sensor, has a limited contribution to pain and itch processing. , 2020, 15, e0226289.		0