JÃ¼rgen SandkÃ¼hler

List of Publications by Year
in descending order

107 papers	10,288 citations	44069 48 h-index	37204 96 g-index
123 all docs	123 docs citations	123 times ranked	7196 citing authors

#	Article	IF	Citations
1	Anti-Nociceptive and Anti-Aversive Drugs Differentially Modulate Distinct Inputs to the Rat Lateral Parabrachial Nucleus. Journal of Pain, 2022, 23, 1410-1426.	1.4	6
2	GABAergic CaMKIIÎ±+ Amygdala Output Attenuates Pain and Modulates Emotional-Motivational Behavior via Parabrachial Inhibition. Journal of Neuroscience, 2022, 42, 5373-5388.	3.6	14
3	<scp>Laminaâ€specific</scp> properties of spinal astrocytes. Glia, 2021, 69, 1749-1766.	4.9	12
4	Spontaneous, Voluntary, and Affective Behaviours in Rat Models of Pathological Pain. Frontiers in Pain Research, 2021, 2, 672711.	2.0	8
5	Fundamental sex differences in morphine withdrawal-induced neuronal plasticity. Pain, 2020, 161, 2022-2034.	4.2	15
6	Interferon-Î³ facilitates the synaptic transmission between primary afferent C-fibres and lamina I neurons in the rat spinal dorsal horn via microglia activation. Molecular Pain, 2020, 16, 174480692091724.	2.1	18
7	Withdrawal from an opioid induces a transferable memory trace in the cerebrospinal fluid. Pain, 2019, 160, 2819-2828.	4.2	6
8	A brief, high-dose remifentanil infusion partially reverses neuropathic pain in a subgroup of post herpetic neuralgia patients. Journal of Clinical Neuroscience, 2017, 40, 195-197.	1.5	1
9	Gliogenic LTP spreads widely in nociceptive pathways. Science, 2016, 354, 1144-1148.	12.6	138
10	Pronociceptive and Antinociceptive Effects of Buprenorphine in the Spinal Cord Dorsal Horn Cover a Dose Range of Four Orders of Magnitude. Journal of Neuroscience, 2015, 35, 9580-9594.	3.6	19
11	Presynaptic inhibition of optogenetically identified VGluT3+ sensory fibres by opioids and baclofen. Pain, 2015, 156, 243-251.	4.2	24
12	Translating synaptic plasticity into sensation. Brain, 2015, 138, 2463-2464.	7.6	10
13	Selective Activation of Microglia Facilitates Synaptic Strength. Journal of Neuroscience, 2015, 35, 4552-4570.	3.6	142
14	Nozizeptives System von FrÃ¼h- und Neugeborenen. , 2015, , 35-48.		0
15	VGluT3⁺Primary Afferents Play Distinct Roles in Mechanical and Cold Hypersensitivity Depending on Pain Etiology. Journal of Neuroscience, 2014, 34, 12015-12028.	3.6	47
16	Neurogenic neuroinflammation: inflammatory CNS reactions in response to neuronal activity. Nature Reviews Neuroscience, 2014, 15, 43-53.	10.2	473
17	Pain in neuromyelitis opticaâ€"prevalence, pathogenesis and therapy. Nature Reviews Neurology, 2014, 10, 529-536.	10.1	77
18	Induction of Thermal Hyperalgesia and Synaptic Long-Term Potentiation in the Spinal Cord Lamina I by TNF-Î± and IL-1Î² is Mediated by Glial Cells. Journal of Neuroscience, 2013, 33, 6540-6551.	3.6	178

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19	Non-Hebbian plasticity at C-fiber synapses in rat spinal cord lamina I neurons. Pain, 2013, 154, 1333-1342.	4.2	34
20	How to erase memory traces of pain and fear. Trends in Neurosciences, 2013, 36, 343-352.	8.6	75
21	Properties of spinal lamina <scp>III GABAergic</scp> neurons in naÃ¯ve and in neuropathic mice. European Journal of Pain, 2013, 17, 1168-1179.	2.8	12
22	Impaired Excitatory Drive to Spinal Gabaergic Neurons of Neuropathic Mice. PLoS ONE, 2013, 8, e73370.	2.5	58
23	Hyperalgesia by synaptic long-term potentiation (LTP): an update. Current Opinion in Pharmacology, 2012, 12, 18-27.	3.5	149
24	Effects of Peripheral Inflammation on the Blood-Spinal Cord Barrier. Molecular Pain, 2012, 8, 1744-8069-8-44.	2.1	26
25	Erasure of a Spinal Memory Trace of Pain by a Brief, High-Dose Opioid Administration. Science, 2012, 335, 235-238.	12.6	86
26	Multiple Targets of Î¼-Opioid Receptor-Mediated Presynaptic Inhibition at Primary Afferent AÎ´- and C-Fibers. Journal of Neuroscience, 2011, 31, 1313-1322.	3.6	123
27	Long-Term Potentiation in Spinal Nociceptive Pathways as a Novel Target for Pain Therapy. Molecular Pain, 2011, 7, 1744-8069-7-20.	2.1	184
28	Central Nervous System Mast Cells in Peripheral Inflammatory Nociception. Molecular Pain, 2011, 7, 1744-8069-7-42.	2.1	66
29	Heterosynaptic Long-Term Potentiation at GABAergic Synapses of Spinal Lamina I Neurons. Journal of Neuroscience, 2011, 31, 17383-17391.	3.6	40
30	Distinct Mechanisms Underlying Pronociceptive Effects of Opioids. Journal of Neuroscience, 2011, 31, 16748-16756.	3.6	60
31	Central Sensitization Versus Synaptic Long-Term Potentiation (LTP): A Critical Comment. Journal of Pain, 2010, 11, 798-800.	1.4	26
32	Models and Mechanisms of Hyperalgesia and Allodynia. Physiological Reviews, 2009, 89, 707-758.	28.8	968
33	Direct excitation of spinal GABAergic interneurons by noradrenaline. Pain, 2009, 145, 204-210.	4.2	71
34	Induction of Synaptic Long-Term Potentiation After Opioid Withdrawal. Science, 2009, 325, 207-210.	12.6	182
35	Long-Term Potentiation in Superficial Spinal Dorsal Horn: A Pain Amplifier. , 2009, , 201-218.		1
36	Long-Term Potentiation at C-Fibre Synapses by Low-Level Presynaptic Activity <i>in vivo</i>. Molecular Pain, 2008, 4, 1744-8069-4-18.	2.1	56

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37	Spread of excitation across modality borders in spinal dorsal horn of neuropathic rats. Pain, 2008, 135, 300-310.	4.2	60
38	Abundance of Degrees of Freedom. , 2008, , 3-3.		1
39	Xenon Blocks the Induction of Synaptic Long-Term Potentiation in Pain Pathways in the Rat Spinal Cord In Vivo. Anesthesia and Analgesia, 2007, 104, 106-111.	2.2	21
40	Effects of the NMDA-receptor antagonist ketamine on perceptual correlates of long-term potentiation within the nociceptive system. Neuropharmacology, 2007, 52, 655-661.	4.1	48
41	Group I metabotropic glutamate receptor-induced Ca2+-gradients in rat superficial spinal dorsal horn neurons. Neuropharmacology, 2007, 52, 1015-1023.	4.1	16
42	Understanding LTP in Pain Pathways. Molecular Pain, 2007, 3, 1744-8069-3-9.	2.1	290
43	Modification of classical neurochemical markers in identified primary afferent neurons with AÎ²-, AÎ´-, and C-fibers after chronic constriction injury in mice. Journal of Comparative Neurology, 2007, 502, 325-336.	1.6	156
44	Synaptic Amplifier of Inflammatory Pain in the Spinal Dorsal Horn. Science, 2006, 312, 1659-1662.	12.6	414
45	Possible sources and sites of action of the nitric oxide involved in synaptic plasticity at spinal lamina i projection neurons. Neuroscience, 2006, 141, 977-988.	2.3	31
46	Physiological properties of spinal lamina II GABAergic neurons in mice following peripheral nerve injury. Journal of Physiology, 2006, 577, 869-878.	2.9	67
47	Opioids and central sensitisation: II. Induction and reversal of hyperalgesia. European Journal of Pain, 2005, 9, 149-152.	2.8	33
48	Opioids and central sensitisation: I. Pre-emptive analgesia. European Journal of Pain, 2005, 9, 145-148.	2.8	10
49	Opioids for chronic nonmalignant and neuropathic pain. European Journal of Pain, 2005, 9, 99-100.	2.8	3
50	Long-range oscillatory Ca2+waves in rat spinal dorsal horn. European Journal of Neuroscience, 2005, 22, 1967-1976.	2.6	29
51	Synaptic input of rat spinal lamina I projection and unidentified neuronesin vitro. Journal of Physiology, 2005, 566, 355-368.	2.9	45
52	Low dose of S(+)-ketamine prevents long-term potentiation in pain pathways under strong opioid analgesia in the rat spinal cord in vivo. British Journal of Anaesthesia, 2005, 95, 518-523.	3.4	46
53	Signal transduction pathways of group I metabotropic glutamate receptor-induced long-term depression at sensory spinal synapses. Pain, 2005, 118, 145-154.	4.2	30
54	Perceptual Correlates of Nociceptive Long-Term Potentiation and Long-Term Depression in Humans. Journal of Neuroscience, 2004, 24, 964-971.	3.6	318

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55	Distinctive membrane and discharge properties of rat spinal lamina I projection neuronesin vitro. Journal of Physiology, 2004, 555, 527-543.	2.9	106
56	Physiological, neurochemical and morphological properties of a subgroup of GABAergic spinal lamina II neurones identified by expression of green fluorescent protein in mice. Journal of Physiology, 2004, 560, 249-266.	2.9	177
57	Pre- and postsynaptic contributions of voltage-dependent Ca2+ channels to nociceptive transmission in rat spinal lamina I neurons. European Journal of Neuroscience, 2004, 19, 103-111.	2.6	142
58	Low Doses of Fentanyl Block Central Sensitization in the Rat Spinal Cord In Vivo. Anesthesiology, 2004, 100, 1545-1551.	2.5	35
59	Partial correlation analysis for the identification of synaptic connections. Biological Cybernetics, 2003, 89, 289-302.	1.3	101
60	Induction of long-term potentiation of C fibre-evoked spinal field potentials requires recruitment of group I, but not group II/III metabotropic glutamate receptors. Pain, 2003, 106, 373-379.	4.2	63
61	Reduction of glycine receptor-mediated miniature inhibitory postsynaptic currents in rat spinal lamina I neurons after peripheral inflammation. Neuroscience, 2003, 122, 799-805.	2.3	56
62	Epileptiform activity in rat spinal dorsal horn in vitro has common features with neuropathic pain. Pain, 2003, 105, 327-338.	4.2	25
63	Synaptic Plasticity in Spinal Lamina I Projection Neurons That Mediate Hyperalgesia. Science, 2003, 299, 1237-1240.	12.6	507
64	Fear the pain. Lancet, The, 2002, 360, 426.	13.7	13
65	Role of kainate receptors in nociception. Brain Research Reviews, 2002, 40, 215-222.	9.0	43
66	Laminaâ€specific membrane and discharge properties of rat spinal dorsal horn neurones in vitro. Journal of Physiology, 2002, 541, 231-244.	2.9	177
67	Bidirectional actions of nociceptin/orphanin FQ on AÎ´-fibre-evoked responses in rat superficial spinal dorsal horn in vitro. Neuroscience, 2001, 107, 275-281.	2.3	20
68	Nozizeption bei FrÃ¼h- und Neugeborenen. Schmerz, 2000, 14, 297-301.	5.3	9
69	Differential actions of spinal analgesics on mono-versus polysynaptic AÎ´-fibre-evoked field potentials in superficial spinal dorsal horn in vitro. Pain, 2000, 88, 97-108.	4.2	16
70	Induction of homosynaptic long-term depression at spinal synapses of sensory AÎ´-fibers requires activation of metabotropic glutamate receptors. Neuroscience, 2000, 98, 141-148.	2.3	65
71	Learning and memory in pain pathways. Pain, 2000, 88, 113-118.	4.2	382
72	Activation of group I metabotropic glutamate receptors induces long-term depression at sensory synapses in superficial spinal dorsal horn. Neuropharmacology, 2000, 39, 2231-2243.	4.1	36

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73	Inhibition of caspases prevents cell death of hippocampal CA1 neurons, but not impairment of hippocampal long-term potentiation following global ischemia. Neuroscience, 1999, 93, 1219-1222.	2.3	101
74	Brain-Derived Neurotrophic Factor Improves Long-Term Potentiation and Cognitive Functions after Transient Forebrain Ischemia in the Rat. Experimental Neurology, 1999, 159, 511-519.	4.1	110
75	Induction of longâ€term potentiation at spinal synapses by noxious stimulation or nerve injury. European Journal of Neuroscience, 1998, 10, 2476-2480.	2.6	272
76	Long-term depression of C-fibre-evoked spinal field potentials by stimulation of primary afferent AÎ´-fibres in the adult rat. European Journal of Neuroscience, 1998, 10, 3069-3075.	2.6	134
77	Activation of spinal N-methyl-d-aspartate or neurokinin receptors induces long-term potentiation of spinal C-fibre-evoked potentials in spinalized rats. Neuroscience, 1998, 86, 1209-1216.	2.3	101
78	Corelease of Two Fast Neurotransmitters at a Central Synapse. , 1998, 281, 419-424.		726
79	Identification of synaptic connections in neural ensembles by graphical models. Journal of Neuroscience Methods, 1997, 77, 93-107.	2.5	90
80	Low dimensional attractors in discharges of sensory neurons of the rat spinal dorsal horn are maintained by supraspinal descending systems. Neuroscience, 1996, 70, 191-200.	2.3	9
81	The massive expression of c-Fos protein in spinal dorsal horn neurons is not followed by long-term changes in spinal nociception. Neuroscience, 1996, 73, 657-666.	2.3	39
82	Synchronicity of nociceptive and non-nociceptive adjacent neurons in the spinal dorsal horn of the rat: stimulus-induced plasticity. Neuroscience, 1996, 76, 39-54.	2.3	35
83	The organization and function of endogenous antinociceptive systems. Progress in Neurobiology, 1996, 50, 49-81.	5.7	15
84	Distinct patterns of activated neurons throughout the rat midbrain periaqueductal gray induced by chemical stimulation within its subdivisions. Journal of Comparative Neurology, 1995, 357, 546-553.	1.6	22
85	Controlled superfusion of the rat spinal cord for studying non-synaptic transmission: an autoradiographic analysis. Journal of Neuroscience Methods, 1995, 58, 193-202.	2.5	47
86	Long-term potentiation of C-fiber-evoked potentials in the rat spinal dorsal horn is prevented by spinal N-methyl-d-aspartic acid receptor blockage. Neuroscience Letters, 1995, 191, 43-46.	2.1	304
87	Differential effects of spinalization on discharge patterns and discharge rates of simultaneously recorded nociceptive and non-nociceptive spinal dorsal horn neurons. Pain, 1995, 60, 55-65.	4.2	31
88	The effects of extrasynaptic substance P on nociceptive neurons in laminae I and II in rat lumbar spinal dorsal horn. Neuroscience, 1995, 68, 1207-1218.	2.3	31
89	Inhibition of spinal nociceptive neurons by microinjections of somatostatin into the nucleus raphe magnus and the midbrain periaqueductal gray of the anesthetized cat. Neuroscience Letters, 1995, 187, 137-141.	2.1	34
90	Map of spinal neurons activated by chemical stimulation in the nucleus raphe magnus of the unanesthetized rat. Neuroscience, 1995, 67, 497-504.	2.3	15

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91	Inhibition of c-Fos Protein Expression in Rat Spinal Cord by Antisense Oligodeoxynucleotide Superfusion. European Journal of Neuroscience, 1994, 6, 880-884.	2.6	53
92	Identification and characterization of rhythmic nociceptive and non-nociceptive spinal dorsal horn neurons in the rat. Neuroscience, 1994, 61, 991-1006.	2.3	43
93	JUN, FOS, KROX, and CREB transcription factor proteins in the rat cortex: Basal expression and induction by spreading depression and epileptic seizures. Journal of Comparative Neurology, 1993, 333, 271-288.	1.6	166
94	Characteristics of propriospinal modulation of nociceptive lumbar spinal dorsal horn neurons in the cat. Neuroscience, 1993, 54, 957-967.	2.3	41
95	Potentiated expression of FOS protein in the rat spinal cord following bilateral noxious cutaneous stimulation. Neuroscience, 1992, 48, 525-532.	2.3	78
96	Characteristics of midbrain control of spinal nociceptive neurons and nonsomatosensory parameters in the pentobarbital-anesthetized rat. Journal of Neurophysiology, 1991, 65, 33-48.	1.8	41
97	Induction of the Proto-Oncogene c-fos as a Cellular Marker of Brainstem Neurons Activated from the PAG. , 1991, , 267-286.		9
98	B-vitamins enhance afferent inhibitory controls of nociceptive neurons in the rat spinal cord. Klinische Wochenschrift, 1990, 68, 125-128.	0.6	9
99	Spinal somatostatin superfusion in vivo affects activity of cat nociceptive dorsal horn neurons: Comparison with spinal morphine. Neuroscience, 1990, 34, 565-576.	2.3	88
100	Blockade of GABAA receptors in the midbrain periaqueductal gray abolishes nociceptive spinal dorsal horn neuronal activity. European Journal of Pharmacology, 1989, 160, 163-166.	3.5	57
101	Inhibition of spinal nociceptive neurons by excitation of cell bodies or fibers of passage at various brainstem sites in the cat. Neuroscience Letters, 1988, 93, 67-72.	2.1	17
102	Chapter 23 Neuronal effects of controlled superfusion of the spinal cord with monoaminergic receptor antagonists in the cat. Progress in Brain Research, 1988, 77, 321-327.	1.4	3
103	Pentobarbital, in subanesthetic doses, depresses spinal transmission of nociceptive information but does not affect stimulation-produced descending inhibition in the cat. Pain, 1987, 31, 381-390.	4.2	20
104	Raphe magnus-induced descending inhibition of spinal nociceptive neurons is mediated through contralateral spinal pathways in the cat. Neuroscience Letters, 1987, 76, 168-172.	2.1	15
105	Spinal pathways mediating tonic or stimulation-produced descending inhibition from the periaqueductal gray or nucleus raphe magnus are separate in the cat. Journal of Neurophysiology, 1987, 58, 327-341.	1.8	71
106	Characterization of inhibition of a spinal nociceptive reflex by stimulation medially and laterally in the midbrain and medulla in the pentobarbital-anesthetized rat. Brain Research, 1984, 305, 67-76.	2.2	191
107	Relative contributions of the nucleus raphe magnus and adjacent medullary reticular formation to the inhibition by stimulation in the periaqueductal gray of a spinal nociceptive reflex in the pentobarbital-anesthetized rat. Brain Research, 1984, 305, 77-87.	2.2	248