Martin Koltzenburg

List of Publications by Year
in descending order

144 papers	19,412 citations	11651 70 h-index	11052 137 g-index
153 all docs	153 docs citations	153 times ranked	15482 citing authors

#	Article	IF	Citations
1	Short interval intracortical inhibition: Variability of amplitude and threshold-tracking measurements with 6 or 10 stimuli per point. Neurophysiologie Clinique, 2022, 52, 170-173.	2.2	2
2	Short latency afferent inhibition: comparison between threshold-tracking and conventional amplitude recording methods. Experimental Brain Research, 2022, 240, 1241-1247.	1.5	2
3	Neurogenic inflammation as a novel treatment target for chronic pain syndromes. Experimental Neurology, 2022, 356, 114108.	4.1	14
4	Effects of Mexiletine and Lacosamide on Nerve Excitability in Healthy Subjects: A Randomized, Doubleâ€Blind, Placeboâ€Controlled, Crossover Study. Clinical Pharmacology and Therapeutics, 2022, 112, 1008-1019.	4.7	1
5	Short-interval intracortical inhibition as a function of inter-stimulus interval: Three methods compared. Brain Stimulation, 2021, 14, 22-32.	1.6	22
6	Comparison of figure-of-8 and circular coils for threshold tracking transcranial magnetic stimulation measurements. Neurophysiologie Clinique, 2021, 51, 153-160.	2.2	10
7	Early diagnosis of amyotrophic lateral sclerosis by threshold tracking and conventional transcranial magnetic stimulation. European Journal of Neurology, 2021, 28, 3030-3039.	3.3	19
8	Conventional and Threshold-Tracking Transcranial Magnetic Stimulation Tests for Single-handed Operation. Journal of Visualized Experiments, 2021, , .	0.3	1
9	Early neurophysiological biomarkers and spinal cord pathology in inherited prion disease. Brain, 2019, 142, 760-770.	7.6	16
10	Functional imaging in microfluidic chambers reveals sensory neuron sensitivity is differentially regulated between neuronal regions. Pain, 2018, 159, 1413-1425.	4.2	6
11	Short-interval intracortical inhibition: Comparison between conventional and threshold-tracking techniques. Brain Stimulation, 2018, 11, 806-817.	1.6	51
12	Long-Term Outcome of Brachial Plexus Reimplantation After Complete Brachial Plexus Avulsion Injury. World Neurosurgery, 2017, 103, 28-36.	1.3	24
13	Thermosensory Perceptual Learning Is Associated with Structural Brain Changes in Parietalâ€“Opercular (SII) Cortex. Journal of Neuroscience, 2017, 37, 9380-9388.	3.6	14
14	Inner tegument proteins of Herpes Simplex Virus are sufficient for intracellular capsid motility in neurons but not for axonal targeting. PLoS Pathogens, 2017, 13, e1006813.	4.7	31
15	Fast-adapting mechanoreceptors are important for force control in precision grip but not for sensorimotor memory. Journal of Neurophysiology, 2016, 115, 3156-3161.	1.8	9
16	Potential risks of iatrogenic complications of nerve conduction studies (NCS) and electromyography (EMG). Clinical Neurophysiology Practice, 2016, 1, 62-66.	1.4	27
17	Phenytoin for neuroprotection in patients with acute optic neuritis: a randomised, placebo-controlled, phase 2 trial. Lancet Neurology, The, 2016, 15, 259-269.	10.2	168
18	PERIPHERAL NERVE BING-NEEL SYNDROME. Journal of Neurology, Neurosurgery and Psychiatry, 2015, 86, e4.59-e4.	1.9	3

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19	Unusual demyelinating pathology in a case of adult polyglucosan body disease. Neuromuscular Disorders, 2015, 25, S222.	0.6	2
20	c-Jun activation in Schwann cells protects against loss of sensory axons in inherited neuropathy. Brain, 2014, 137, 2922-2937.	7.6	59
21	Novel mutations in human and mouse SCN4A implicate AMPK in myotonia and periodic paralysis. Brain, 2014, 137, 3171-3185.	7.6	23
22	Pain and small fiber function in charcotâ€“marieâ€“tooth disease type 1A. Muscle and Nerve, 2014, 50, 366-371.	2.2	26
23	A Novel Prion Disease Associated with Diarrhea and Autonomic Neuropathy. New England Journal of Medicine, 2013, 369, 1904-1914.	27.0	113
24	Uncertainty Increases Pain: Evidence for a Novel Mechanism of Pain Modulation Involving the Periaqueductal Gray. Journal of Neuroscience, 2013, 33, 5638-5646.	3.6	109
25	Deletion of chromosome 12q21 affectingKCNC2andATXN7L3Bin a family with neurodevelopmental delay and ataxia. Journal of Neurology, Neurosurgery and Psychiatry, 2013, 84, 1255-1257.	1.9	17
26	Chemotherapyâ€induced peripheral neurotoxicity: A critical analysis. Ca-A Cancer Journal for Clinicians, 2013, 63, 419-437.	329.8	547
27	Kidins220/ARMS mediates the integration of the neurotrophin and VEGF pathways in the vascular and nervous systems. Cell Death and Differentiation, 2012, 19, 194-208.	11.2	62
28	Longitudinal assessment of oxaliplatin-induced neuropathy. Neurology, 2012, 78, 152-152.	1.1	4
29	Isolated motor conduction block associated with infliximab. Journal of Neurology, 2012, 259, 1758-1760.	3.6	3
30	Chronic immune sensory polyradiculopathy with cranial and peripheral nerve involvement. Journal of Neurology, 2012, 259, 1238-1240.	3.6	12
31	Protons regulate the excitability properties of rat myelinated sensory axons in vitro through block of persistent sodium currents. Journal of the Peripheral Nervous System, 2012, 17, 102-111.	3.1	5
32	Antagonism of Nerve Growth Factor-TrkA Signaling and the Relief of Pain. Anesthesiology, 2011, 115, 189-204.	2.5	285
33	Self-Mutilation in Patients After Nerve Injury May Not Be Due to Deafferentation Pain: A Case Report. Pain Medicine, 2011, 12, 1644-1648.	1.9	2
34	Refined exercise testing can aid dnaâ€based diagnosis in muscle channelopathies. Annals of Neurology, 2011, 69, 328-340.	5.3	85
35	Kidins220/ARMS is an essential modulator of cardiovascular and nervous system development. Cell Death and Disease, 2011, 2, e226-e226.	6.3	50
36	TRP Vanilloid 2 Knock-Out Mice Are Susceptible to Perinatal Lethality But Display Normal Thermal and Mechanical Nociception. Journal of Neuroscience, 2011, 31, 11425-11436.	3.6	193

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37	Behavioral and Other Phenotypes in a Cytoplasmic Dynein Light Intermediate Chain 1 Mutant Mouse. Journal of Neuroscience, 2011, 31, 5483-5494.	3.6	23
38	Uncovering Genomic Causes of Co-Morbidity in Epilepsy: Gene-Driven Phenotypic Characterization of Rare Microdeletions. PLoS ONE, 2011, 6, e23182.	2.5	24
39	In vivo assessment of HCN channel current (I_h) in human motor axons. Muscle and Nerve, 2010, 41, 247-256.	2.2	50
40	An ENU-induced mutation in mouse glycyl-tRNA synthetase (GARS) causes peripheral sensory and motor phenotypes creating a model of Charcot-Marie-Tooth type 2D peripheral neuropathy. DMM Disease Models and Mechanisms, 2009, 2, 359-373.	2.4	91
41	Peripheral nerve damage associated with administration of taxanes in patients with cancer. Critical Reviews in Oncology/Hematology, 2008, 66, 218-228.	4.4	211
42	Histone H2AX-dependent GABAA receptor regulation of stem cell proliferation. Nature, 2008, 451, 460-464.	27.8	255
43	ProTx-II, a Selective Inhibitor of Na_V1.7 Sodium Channels, Blocks Action Potential Propagation in Nociceptors. Molecular Pharmacology, 2008, 74, 1476-1484.	2.3	280
44	The Role of TRP Channels in Sensory Neurons. Novartis Foundation Symposium, 2008, , 206-220.	1.1	16
45	The Rabies Virus Glycoprotein Receptor p75 ^{NTR} Is Not Essential for Rabies Virus Infection. Journal of Virology, 2007, 81, 13622-13630.	3.4	66
46	Emergence of Functional Sensory Subtypes as Defined by Transient Receptor Potential Channel Expression. Journal of Neuroscience, 2007, 27, 2435-2443.	3.6	184
47	Magnetic resonance imaging of skeletal muscle. Current Opinion in Neurology, 2007, 20, 595-599.	3.6	34
48	A rat in vitro model for the measurement of multiple excitability properties of cutaneous axons. Clinical Neurophysiology, 2007, 118, 2404-2412.	1.5	18
49	Many cold sensitive peripheral neurons of the mouse do not express TRPM8 or TRPA1. Cell Calcium, 2007, 41, 331-342.	2.4	113
50	NeuropatÃas perifÃ©ricas dolorosas. , 2007, , 997-1025.		0
51	In vitro and in vivo differentiation of boundary cap neural crest stem cells into mature Schwann cells. Experimental Neurology, 2006, 198, 438-449.	4.1	100
52	Differential sensitivity of three experimental pain models in detecting the analgesic effects of transdermal fentanyl and buprenorphine. Pain, 2006, 126, 165-174.	4.2	61
53	The role of the capsaicin receptor TRPV1 and acid-sensing ion channels (ASICS) in proton sensitivity of subpopulations of primary nociceptive neurons in rats and mice. Neuroscience, 2006, 139, 699-709.	2.3	113
54	Microarray analysis after RNA amplification can detect pronounced differences in gene expression using limma. BMC Genomics, 2006, 7, 252.	2.8	480

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55	Denervation hypertrophy may mimic local tumor spread on magnetic resonance imaging. Muscle and Nerve, 2006, 34, 108-110.	2.2	6
56	Painful peripheral neuropathies. , 2006, , 973-999.		24
57	Opponent appetitive-aversive neural processes underlie predictive learning of pain relief. Nature Neuroscience, 2005, 8, 1234-1240.	14.8	384
58	The boundary cap: a source of neural crest stem cells that generate multiple sensory neuron subtypes. Development (Cambridge), 2005, 132, 2623-2632.	2.5	112
59	Modulation of pain processing in hyperalgesia by cognitive demand. NeuroImage, 2005, 27, 59-69.	4.2	147
60	Mechanisms of peripheral neuropathic pain. , 2005, , 115-148.		1
61	Nociceptors Lacking TRPV1 and TRPV2 Have Normal Heat Responses. Journal of Neuroscience, 2004, 24, 6410-6415.	3.6	242
62	Heparin and Air Filters Reduce Embolic Events Caused by Intra-Arterial Cerebral Angiography. Circulation, 2004, 110, 2210-2215.	1.6	95
63	Temporal difference models describe higher-order learning in humans. Nature, 2004, 429, 664-667.	27.8	557
64	Muscle magnetic resonance imaging of denervation and reinnervation: correlation with electrophysiology and histology. Experimental Neurology, 2004, 185, 254-261.	4.1	105
65	MRI of peripheral nerve degeneration and regeneration: correlation with electrophysiology and histology. Experimental Neurology, 2004, 188, 171-177.	4.1	161
66	The functional expression of mu opioid receptors on sensory neurons is developmentally regulated; morphine analgesia is less selective in the neonate. Pain, 2004, 111, 38-50.	4.2	68
67	Cold-sensitive, menthol-insensitive neurons in the murine sympathetic nervous system. NeuroReport, 2004, 15, 1399-1403.	1.2	39
68	Imaging of peripheral nerve lesions. Current Opinion in Neurology, 2004, 17, 621-626.	3.6	70
69	No overlap of sensitivity to capsaicin and expression of galanin in rat dorsal root ganglion neurons after axotomy. Experimental Brain Research, 2003, 153, 1-6.	1.5	8
70	No further loss of dorsal root ganglion cells after axotomy in p75 neurotrophin receptor knockout mice. Journal of Comparative Neurology, 2003, 459, 242-250.	1.6	29
71	Axoplasmic Importins Enable Retrograde Injury Signaling in Lesioned Nerve. Neuron, 2003, 40, 1095-1104.	8.1	459
72	Mechanism-Based Classi.cations of Pain and Analgesic Drug Discovery. , 2003, , .		1

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73	Brain Damage After Coronary Artery Bypass Grafting. Archives of Neurology, 2002, 59, 1090.	4.5	123
74	Predominant neuronal B-cell loss in L5 DRG of p75 receptor-deficient mice. Journal of Anatomy, 2002, 200, 81-87.	1.5	20
75	Molecular mechanisms of cancer pain. Nature Reviews Cancer, 2002, 2, 201-209.	28.4	417
76	Sequential MR imaging of denervated muscle: experimental study. American Journal of Neuroradiology, 2002, 23, 1427-31.	2.4	92
77	Glutamate-induced excitation and sensitization of nociceptors in rat glabrous skin. Pain, 2001, 89, 187-198.	4.2	106
78	Neuropathic pain. Current Opinion in Neurology, 2001, 14, 641-647.	3.6	75
79	MRI in isolated sixth nerve palsies. Neuroradiology, 2001, 43, 742-745.	2.2	56
80	Neural Mechanisms of Cutaneous Nociceptive Pain. Clinical Journal of Pain, 2000, 16, S131-S138.	1.9	76
81	Changes of copper-transporting proteins and ceruloplasmin in the lentiform nuclei in primary adult-onset dystonia. Annals of Neurology, 2000, 47, 827-830.	5.3	54
82	Increase in NGF content and nerve fiber sprouting in human allergic contact eczema. Cell and Tissue Research, 2000, 302, 31-37.	2.9	111
83	Localization of ionotropic glutamate receptors in peripheral axons of human skin. Neuroscience Letters, 2000, 283, 149-152.	2.1	93
84	Impaired Nociception and Pain Sensation in Mice Lacking the Capsaicin Receptor. Science, 2000, 288, 306-313.	12.6	3,156
85	Overexpression of Nerve Growth Factor in Skin Selectively Affects the Survival and Functional Properties of Nociceptors. Journal of Neuroscience, 1999, 19, 8509-8516.	3.6	95
86	Loss of Distal Axons and Sensory Merkel Cells and Features Indicative of Muscle Denervation in Hindlimbs of P0-Deficient Mice. Journal of Neuroscience, 1999, 19, 6058-6067.	3.6	86
87	Neutralization of endogenous NGF prevents the sensitization of nociceptors supplying inflamed skin. European Journal of Neuroscience, 1999, 11, 1698-1704.	2.6	177
88	Postnatal loss of Merkel cells, but not of slowly adapting mechanoreceptors in mice lacking the neurotrophin receptor p75. European Journal of Neuroscience, 1999, 11, 3963-3969.	2.6	50
89	The changing sensitivity in the life of the nociceptor. Pain, 1999, 82, S93-S102.	4.2	74
90	Does the right side know what the left is doing?. Trends in Neurosciences, 1999, 22, 122-127.	8.6	448

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91	Silent embolism in diagnostic cerebral angiography and neurointerventional procedures: a prospective study. Lancet, The, 1999, 354, 1594-1597.	13.7	484
92	A role for BDNF in mechanosensation. Nature Neuroscience, 1998, 1, 42-46.	14.8	168
93	Case report Man-in-the-barrel syndrome caused by cervical spinal cord infarction. Acta Neurologica Scandinavica, 1998, 97, 417-419.	2.1	72
94	Selective degeneration of sudomotor fibers in Ross syndrome and successful treatment of compensatory hyperhidrosis with botulinum toxin. , 1998, 21, 1790-1793.		56
95	Endogenous nerve growth factor regulates the sensitivity of nociceptors in the adult rat. European Journal of Neuroscience, 1998, 10, 1282-1291.	2.6	127
96	Nerve growth factor evokes hyperalgesia in mice lacking the low-affinity neurotrophin receptor p75. Neuroscience Letters, 1998, 255, 87-90.	2.1	85
97	Towards a mechanism-based classification of pain?. Pain, 1998, 77, 227-229.	4.2	461
98	Nerve growth factor regulates the expression of bradykinin binding sites on adult sensory neurons via the neurotrophin receptor p75. Neuroscience, 1998, 83, 161-168.	2.3	59
99	What is the potential of studying receptor expression on nociceptors?. Pain Forum, 1998, 7, 79-83.	1.1	0
100	Neurotrophin 4 Is Required for the Survival of a Subclass of Hair Follicle Receptors. Journal of Neuroscience, 1998, 18, 7040-7046.	3.6	71
101	Complex Regional Pain Syndromes: Guidelines for Therapy. Clinical Journal of Pain, 1998, 14, 155-166.	1.9	346
102	Painful neuropathies. Current Opinion in Neurology, 1998, 11, 515-521.	3.6	70
103	The Low-Affinity Neurotrophin Receptor p75 Regulates the Function But Not the Selective Survival of Specific Subpopulations of Sensory Neurons. Journal of Neuroscience, 1997, 17, 4398-4405.	3.6	69
104	Receptive Properties of Mouse Sensory Neurons Innervating Hairy Skin. Journal of Neurophysiology, 1997, 78, 1841-1850.	1.8	330
105	Receptive Properties of Embryonic Chick Sensory Neurons Innervating Skin. Journal of Neurophysiology, 1997, 78, 2560-2568.	1.8	32
106	Analysis of Cutaneous Sensory Neurons in Transgenic Mice Lacking the Low Affinity Neurotrophin Receptor p75. European Journal of Neuroscience, 1997, 9, 18-28.	2.6	83
107	154 Specific subtypes of cutaneous mechanoreceptors require neurotrophin-3 following peripheral target innervation. International Journal of Developmental Neuroscience, 1996, 14, 87-87.	1.6	9
108	Asymmetry and time-course of cutaneous sympathetic reflex responses following sustained excitation of chemosensitive nociceptors in humans. Journal of the Autonomic Nervous System, 1996, 57, 63-72.	1.9	31

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109	Functional reinnervation of sweat glands in the adult cat paw by inappropriate postganglionic axons. Journal of the Autonomic Nervous System, 1996, 60, 193-199.	1.9	5
110	Specific Subtypes of Cutaneous Mechanoreceptors Require Neurotrophin-3 Following Peripheral Target Innervation. Neuron, 1996, 16, 287-295.	8.1	213
111	Stability and plasticity of nociceptor function and their relationship to provoked and ongoing pain. Seminars in Neuroscience, 1995, 7, 199-210.	2.2	24
112	Visceral pain. British Journal of Anaesthesia, 1995, 75, 132-144.	3.4	135
113	Peripheral administration of nerve growth factor in the adult rat produces a thermal hyperalgesia that requires the presence of sympathetic post-ganglionic neurones. Pain, 1995, 63, 109-115.	4.2	209
114	Noradrenaline-evoked pain in neuralgia. Pain, 1995, 63, 11-20.	4.2	221
115	Pain and hyperalgesia in acute inflammatory and chronic neuropathic conditions. Lancet, The, 1995, 345, 1111.	13.7	14
116	Functional reinnervation of the vasculature of the adult cat paw pad by axons originally innervating vessels in hairy skin. Neuroscience, 1995, 67, 245-252.	2.3	59
117	Differential ability of human cutaneous nociceptors to signal mechanical pain and to produce vasodilatation. Journal of Neuroscience, 1994, 14, 1756-1765.	3.6	199
118	Nociceptor modulated central sensitization causes mechanical hyperalgesia in acute chemogenic and chronic neuropathic pain. Brain, 1994, 117, 579-591.	7.6	486
119	The ability of humans to localise noxious stimuli. Neuroscience Letters, 1993, 150, 219-222.	2.1	61
120	Dynamic and static components of mechanical hyperalgesia in human hairy skin. Pain, 1993, 53, 363.	4.2	2
121	Myelinated primary afferents of the sacral spinal cord responding to slow filling and distension of the cat urinary bladder.. Journal of Physiology, 1993, 463, 449-460.	2.9	141
122	Receptive properties of myelinated primary afferents innervating the inflamed urinary bladder of the cat. Journal of Neurophysiology, 1993, 69, 395-405.	1.8	100
123	Itching for an explanation. Trends in Neurosciences, 1992, 15, 497-501.	8.6	173
124	The nociceptor sensitization by bradykinin does not depend on sympathetic neurons. Neuroscience, 1992, 46, 465-473.	2.3	174
125	Viscero-sympathetic reflex responses to mechanical stimulation of pelvic viscera in the cat. Journal of the Autonomic Nervous System, 1992, 38, 147-158.	1.9	22
126	Dynamic and static components of mechanical hyperalgesia in human hairy skin. Pain, 1992, 51, 207-219.	4.2	464

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127	Responsiveness and functional attributes of electrically localized terminals of cutaneous C-fibers in vivo and in vitro. Journal of Neurophysiology, 1992, 68, 581-595.	1.8	289
128	Receptive properties of pial afferents. Pain, 1991, 45, 77-85.	4.2	24
129	A novel technique for the evaluation of mechanical pain and hyperalgesia. Pain, 1991, 46, 81-87.	4.2	73
130	The enigmatic role of the sympathetic nervous system in chronic pain. Trends in Pharmacological Sciences, 1991, 12, 399-402.	8.7	43
131	Receptive properties of sacral primary afferent neurons supplying the colon. Journal of Neurophysiology, 1991, 65, 1067-1077.	1.8	109
132	Activation of unmyelinated afferent fibres by mechanical stimuli and inflammation of the urinary bladder in the cat.. Journal of Physiology, 1990, 425, 545-562.	2.9	480
133	A quantitative study of the central projection patterns of unmyelinated ventral root afferents in the cat.. Journal of Physiology, 1990, 422, 265-287.	2.9	22
134	The changing role of primary afferent neurones in pain. Pain, 1990, 43, 269-272.	4.2	81
135	On the function of spinal primary afferent fibres supplying colon and urinary bladder. Journal of the Autonomic Nervous System, 1990, 30, S89-S96.	1.9	106
136	Increase of blood flow in skin and spinal cord following activation of small diameter primary afferents. Brain Research, 1990, 509, 145-149.	2.2	20
137	Novel classes of nociceptors: beyond Sherrington. Trends in Neurosciences, 1990, 13, 199-201.	8.6	107
138	A novel type of unmyelinated chemosensitive nociceptor in the acutely inflamed urinary bladder. Agents and Actions, 1988, 25, 219-221.	0.7	126
139	Dichotomizing unmyelinated afferents supplying pelvic viscera and perineum are rare in the sacral segments of the cat. Neuroscience Letters, 1988, 94, 119-124.	2.1	30
140	Activation of unmyelinated afferents in chronically lesioned nerves by adrenaline and excitation of sympathetic efferents in the cat. Neuroscience Letters, 1987, 82, 35-40.	2.1	101
141	Ontogeny of peptide- and amine-containing neurones in motor, sensory, and autonomic regions of rat and human spinal cord, dorsal root ganglia, and rat skin. Journal of Comparative Neurology, 1987, 266, 332-359.	1.6	250
142	Plasma extravasation in the rat urinary bladder following mechanical, electrical and chemical stimuli: evidence for a new population of chemosensitive primary sensory afferents. Neuroscience Letters, 1986, 72, 352-356.	2.1	80
143	The functional development of descending inhibitory pathways in the dorsolateral funiculus of the newborn rat spinal cord. Developmental Brain Research, 1986, 24, 261-270.	1.7	253
144	Neuronal maturation in human and rat spinal cord assessed by immunoreactivity for substance P, calcitonin gene-related peptide (CGRP), galanin and neurofilament proteins. Regulatory Peptides, 1985, 13, 65.	1.9	2