Karl Messlinger

List of Publications by Year
in descending order

86 papers	3,464 citations	147801 31 h-index	144013 57 g-index
93 all docs	93 docs citations	93 times ranked	2729 citing authors

#	Article	IF	Citations
1	Activation of the trigeminal system as a likely target of SARS-CoV-2 may contribute to anosmia in COVID-19. Cephalalgia, 2022, 42, 176-180.	3.9	19
2	Nitroxyl Delivered by Angeliâ€™s Salt Causes Short-Lasting Activation Followed by Long-Lasting Deactivation of Meningeal Afferents in Models of Headache Generation. International Journal of Molecular Sciences, 2022, 23, 2330.	4.1	0
3	Petasites for Migraine Prevention: New Data on Mode of Action, Pharmacology and Safety. A Narrative Review. Frontiers in Neurology, 2022, 13, 864689.	2.4	2
4	Cyclic changes of sensory parameters in migraine patients. Cephalalgia, 2022, 42, 1148-1159.	3.9	1
5	The Anti-CGRP Antibody Fremanezumab Lowers CGRP Release from Rat Dura Mater and Meningeal Blood Flow. Cells, 2022, 11, 1768.	4.1	12
6	Responses of spinal trigeminal neurons to noxious stimulation of paranasal cavities â€“ a rat model of rhinosinusitis headache. Cephalalgia, 2021, 41, 535-545.	3.9	2
7	Craniofacial sensations induced by transient changes of barometric pressure in healthy subjects â€“ A crossover pilot study. Cephalalgia Reports, 2021, 4, 251581632110003.	0.7	3
8	Petasin and isopetasin reduce CGRP release from trigeminal afferents indicating an inhibitory effect on TRPA1 and TRPV1 receptor channels. Journal of Headache and Pain, 2021, 22, 23.	6.0	12
9	Excitatory Effects of Calcitonin Gene-Related Peptide (CGRP) on Superficial Sp5C Neurons in Mouse Medullary Slices. International Journal of Molecular Sciences, 2021, 22, 3794.	4.1	6
10	CGRP measurements in human plasma â€“ a methodological study. Cephalalgia, 2021, 41, 1359-1373.	3.9	13
11	CGRP outflow into jugular blood and cerebrospinal fluid and permeance for CGRP of rat dura mater. Journal of Headache and Pain, 2021, 22, 105.	6.0	6
12	The chicken and egg problem: CGRP release due to trigeminal activation or vice versa?. Cephalalgia, 2021, , 033310242110423.	3.9	3
13	Transient activation of spinal trigeminal neurons in a rat model of hypoxia-induced headache. Pain, 2021, 162, 1153-1162.	4.2	5
14	Highâ€dose phenylephrine increases meningeal blood flow through TRPV1 receptor activation and release of calcitonin geneâ€related peptide. European Journal of Pain, 2020, 24, 383-397.	2.8	10
15	Migraine and aura triggered by normobaric hypoxia. Cephalalgia, 2020, 40, 1561-1573.	3.9	16
16	Reactive dicarbonyl compounds cause Calcitonin Gene-Related Peptide release and synergize with inflammatory conditions in mouse skin and peritoneum. Journal of Biological Chemistry, 2020, 295, 6330-6343.	3.4	4
17	Cross-talk signaling in the trigeminal ganglion: role of neuropeptides and other mediators. Journal of Neural Transmission, 2020, 127, 431-444.	2.8	68
18	TRP Channels in the Focus of Trigeminal Nociceptor Sensitization Contributing to Primary Headaches. International Journal of Molecular Sciences, 2020, 21, 342.	4.1	37

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19	Cyclic changes in sensations to painful stimuli in migraine patients. Cephalalgia, 2019, 39, 585-596.	3.9	14
20	Pre- and postoperative headache in patients with meningioma. Cephalalgia, 2019, 39, 533-543.	3.9	7
21	Current understanding of trigeminal ganglion structure and function in headache. Cephalalgia, 2019, 39, 1661-1674.	3.9	97
22	Why is the therapeutic effect of acute antimigraine drugs delayed? A review of controlled trials and hypotheses about the delay of effect. British Journal of Clinical Pharmacology, 2019, 85, 2487-2498.	2.4	6
23	Photoactivation of olfactory sensory neurons does not affect action potential conduction in individual trigeminal sensory axons innervating the rodent nasal cavity. PLoS ONE, 2019, 14, e0211175.	2.5	4
24	Cardio- and cerebrovascular safety of erenumab, a monoclonal antibody targeting CGRP receptors â€“ important studies on human isolated arteries. Cephalalgia, 2019, 39, 1731-1734.	3.9	8
25	Sumatriptan activates TRPA1. Cephalalgia Reports, 2019, 2, 251581631984715.	0.7	1
26	Chronic adriamycin treatment impairs CGRP-mediated functions of meningeal sensory nerves. Neuropeptides, 2018, 69, 46-52.	2.2	6
27	Effect of a calcitonin gene-related peptide-binding L-RNA aptamer on neuronal activity in the rat spinal trigeminal nucleus. Journal of Headache and Pain, 2018, 19, 3.	6.0	9
28	The big CGRP flood - sources, sinks and signalling sites in the trigeminovascular system. Journal of Headache and Pain, 2018, 19, 22.	6.0	94
29	Differential conduction and CGRP release in visceral versus cutaneous peripheral nerves in the mouse. Journal of Neuroscience Research, 2018, 96, 1398-1405.	2.9	3
30	Putative role of 5-HT_{2B} receptors in migraine pathophysiology. Cephalalgia, 2017, 37, 365-371.	3.9	23
31	Possible role of calcitonin geneâ€related peptide in trigeminal modulation of glomerular microcircuits of the rodent olfactory bulb. European Journal of Neuroscience, 2017, 45, 587-600.	2.6	15
32	Stimulation of rat cranial dura mater with potassium chloride causes CGRP release into the cerebrospinal fluid and increases medullary blood flow. Neuropeptides, 2017, 64, 61-68.	2.2	23
33	Hydrogen Sulfide Mediating both Excitatory and Inhibitory Effects in a Rat Model of Meningeal Nociception and Headache Generation. Frontiers in Neurology, 2017, 8, 336.	2.4	19
34	Commentary: Cholinergic Nociceptive Mechanisms in Rat Meninges and Trigeminal Ganglia: Potential Implications for Migraine Pain. Frontiers in Neurology, 2017, 8, 623.	2.4	0
35	ATP-sensitive muscle afferents activate spinal trigeminal neurons with meningeal afferent input in rat â€“ pathophysiological implications for tension-type headache. Journal of Headache and Pain, 2016, 17, 75.	6.0	11
36	Vessel diameter measurements at the medullary brainstem in vivo as an index of trigeminal activity. Brain Research, 2016, 1632, 51-57.	2.2	5

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37	Meningeal blood flow is controlled by <scp>H₂Sâ€NO</scp> crosstalk activating a <scp>HNO</scp>â€<scp>TRPA</scp>1â€<scp>CGRP</scp> signalling pathway. British Journal of Pharmacology, 2016, 173, 431-445.	5.4	53
38	Hydrogen sulfide determines HNO-induced stimulation of trigeminal afferents. Neuroscience Letters, 2015, 602, 104-109.	2.1	19
39	Anatomy of Headache. Headache, 2015, , 1-29.	0.4	7
40	Activity-dependent sensory signal processing in mechanically responsive slowly conducting meningeal afferents. Journal of Neurophysiology, 2014, 112, 3077-3085.	1.8	8
41	Release of CGRP from mouse brainstem slices indicates central inhibitory effect of triptans and kynurenate. Journal of Headache and Pain, 2014, 15, 7.	6.0	38
42	Innervation of Rat and Human Dura Mater and Pericranial Tissues in the Parietoâ€Temporal Region by Meningeal Afferents. Headache, 2014, 54, 996-1009.	3.9	111
43	H2S and NO cooperatively regulate vascular tone by activating a neuroendocrine HNOâ€“TRPA1â€“CGRP signalling pathway. Nature Communications, 2014, 5, 4381.	12.8	324
44	Extracranial projections of meningeal afferents and their impact on meningeal nociception and headache. Pain, 2013, 154, 1622-1631.	4.2	125
45	Changes in calcitonin gene-related peptide (CGRP) receptor component and nitric oxide receptor (sGC) immunoreactivity in rat trigeminal ganglion following glyceroltrinitrate pretreatment. Journal of Headache and Pain, 2013, 14, 74.	6.0	31
46	The calcitonin gene-related peptide receptor antagonist MK-8825 decreases spinal trigeminal activity during nitroglycerin infusion. Journal of Headache and Pain, 2013, 14, 93.	6.0	26
47	Repetitive activity slows axonal conduction velocity and concomitantly increases mechanical activation threshold in single axons of the rat cranial dura. Journal of Physiology, 2012, 590, 725-736.	2.9	46
48	Calcitonin gene-related peptide receptors in rat trigeminal ganglion do not control spinal trigeminal activity. Journal of Neurophysiology, 2012, 108, 431-440.	1.8	23
49	CGRP and NO in the Trigeminal System: Mechanisms and Role in Headache Generation. Headache, 2012, 52, 1411-1427.	3.9	108
50	Altered thermal sensitivity in neurons injured by infraorbital nerve lesion. Neuroscience Letters, 2011, 488, 168-172.	2.1	5
51	Neuropeptide Effects in the Trigeminal System: Pathophysiology and Clinical Relevance in Migraine. Keio Journal of Medicine, 2011, 60, 82-89.	1.1	96
52	Increase in CGRP- and nNOS-immunoreactive neurons in the rat trigeminal ganglion after infusion of an NO donor. Cephalalgia, 2011, 31, 31-42.	3.9	49
53	Increases in Neuronal Activity in Rat Spinal Trigeminal Nucleus Following Changes in Barometric Pressureâ€"Relevance for Weatherâ€Associated Headaches?. Headache, 2010, 50, 1449-1463.	3.9	37
54	Evidence for CGRP reâ€uptake in rat dura mater encephali. British Journal of Pharmacology, 2010, 161, 1885-1898.	5.4	34

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55	Measurement of meningeal blood vessel diameter in vivo with a plug-in for ImageJ. Microvascular Research, 2010, 80, 258-266.	2.5	85
56	Calcitonin gene-related peptide receptor antagonist olcegepant acts in the spinal trigeminal nucleus. Brain, 2009, 132, 3134-3141.	7.6	86
57	Glyceroltrinitrate facilitates stimulated CGRP release but not gene expression of CGRP or its receptor components in rat trigeminal ganglia. Neuropeptides, 2009, 43, 483-489.	2.2	25
58	Migraine: where and how does the pain originate?. Experimental Brain Research, 2009, 196, 179-193.	1.5	124
59	Neurogenic Vascular Responses in the Dura Mater and their Relevance for the Pathophysiology of Headaches. NeuroImmune Biology, 2009, 8, 191-209.	0.2	4
60	Temperatureâ€dependent neuronal regulation of arterial blood flow in rat cranial dura mater. Journal of Neuroscience Research, 2008, 86, 158-164.	2.9	7
61	Calcitonin receptorâ€like receptor (CLR), receptor activityâ€modifying protein 1 (RAMP1), and calcitonin geneâ€related peptide (CGRP) immunoreactivity in the rat trigeminovascular system: Differences between peripheral and central CGRP receptor distribution. Journal of Comparative Neurology, 2008, 507, 1277-1299.	1.6	287
62	Calcitonin receptor-like receptor (CLR), receptor activity-modifying protein 1 (RAMP1), and calcitonin gene-related peptide (CGRP) immunoreactivity in the rat trigeminovascular system: Differences between peripheral and central CGRP receptor distribution. Journal of Comparative Neurology, 2008, 507, spc1-spc1.	1.6	0
63	Calcitonin receptor-like receptor (CLR), receptor activity-modifying protein 1 (RAMP1), and calcitonin gene-related peptide (CGRP) immunoreactivity in the rat trigeminovascular system: Differences between peripheral and central CGRP receptor distribution. Journal of Comparative Neurology, 2008, 507, spc1-spc1.	1.6	0
64	Conduction velocity is regulated by sodium channel inactivation in unmyelinated axons innervating the rat cranial meninges. Journal of Physiology, 2008, 586, 1089-1103.	2.9	137
65	Calcitonin gene-related peptide release from intact isolated dorsal root and trigeminal ganglia. Neuropeptides, 2008, 42, 311-317.	2.2	47
66	Release of calcitonin gene-related peptide from the jugularâ€"nodose ganglion complex in rats â€" A new model to examine the role of cardiac peptidergic and nitrergic innervation. Neuropeptides, 2008, 42, 543-550.	2.2	8
67	The calcitonin gene-related peptide (CGRP) receptor antagonist BIBN4096BS reduces neurogenic increases in dural blood flow. European Journal of Pharmacology, 2007, 562, 103-110.	3.5	30
68	Stimulated release of calcitonin gene-related peptide from the human right atrium in patients with and without diabetes mellitus. Peptides, 2006, 27, 3255-3260.	2.4	4
69	Inhibition of stimulated meningeal blood flow by a calcitonin gene-related peptide binding mirror-image RNA oligonucleotide. British Journal of Pharmacology, 2006, 148, 536-543.	5.4	34
70	Release of calcitonin gene-related peptide from the isolated mouse heart: Methodological validation of a new model. Neuropeptides, 2006, 40, 107-113.	2.2	12
71	Role of different proton-sensitive channels in releasing calcitonin gene-related peptide from isolated hearts of mutant mice. Cardiovascular Research, 2005, 65, 405-410.	3.8	36
72	Variable sensitivity to noxious heat is mediated by differential expression of the CGRP gene. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 12938-12943.	7.1	151

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73	The Nonpeptide Calcitonin Gene-Related Peptide Receptor Antagonist BIBN4096BS Lowers the Activity of Neurons with Meningeal Input in the Rat Spinal Trigeminal Nucleus. Journal of Neuroscience, 2005, 25, 5877-5883.	3.6	124
74	Biphasic Response to Nitric Oxide of Spinal Trigeminal Neurons With Meningeal Input in Ratâ€"Possible Implications for the Pathophysiology of Headaches. Journal of Neurophysiology, 2004, 92, 1320-1328.	1.8	66
75	Effects of acetylsalicylic acid and morphine on neurons of the rostral ventromedial medulla in rat. Neuroscience Research, 2003, 47, 391-397.	1.9	19
76	Nitric Oxide Releases Calcitonin-Gene-Related Peptide from Rat Dura mater Encephali Promoting Increases in Meningeal Blood Flow. Journal of Vascular Research, 2002, 39, 489-496.	1.4	86
77	Possible role of histamine (H1 - and H2 -) receptors in the regulation of meningeal blood flow. British Journal of Pharmacology, 2002, 137, 874-880.	5.4	23
78	Modulation of neuronal activity in the nucleus raphÃ© magnus by the 5-HT1-receptor agonist naratriptan in rat. Pain, 2001, 90, 227-231.	4.2	37
79	Meningeal nociception: Electrophysiological studies related to headache and referred pain. Microscopy Research and Technique, 2001, 53, 129-137.	2.2	22
80	Histological demonstration of increased vascular permeability in the dura mater of the rat. Microscopy Research and Technique, 2001, 53, 229-231.	2.2	5
81	Afferent input to the medullary dorsal horn from the contralateral face in rat. Brain Research, 1999, 826, 321-324.	2.2	16
82	Convergence of meningeal and facial afferents onto trigeminal brainstem neurons: an electrophysiological study in rat and man. Pain, 1999, 82, 229-237.	4.2	54
83	Release of immunoreactive substance P in the brain stem upon stimulation of the cranial dura mater with low pH - inhibition by the serotonin (5-HT1) receptor agonist CP 93,129. British Journal of Pharmacology, 1998, 125, 1726-1732.	5.4	21
84	Effects of the 5-HT1 receptor agonists sumatriptan and CP 93,129 on dural arterial flow in the rat. European Journal of Pharmacology, 1997, 332, 173-181.	3.5	30
85	Chapter 17. Functional morphology of nociceptive and other fine sensory endings (free nerve endings) in different tissues. Progress in Brain Research, 1996, 113, 273-298.	1.4	43
86	Increase of meningeal blood flow after electrical stimulation of rat dura mater encephali: mediation by calcitonin geneâ€related peptide. British Journal of Pharmacology, 1995, 114, 1397-1402.	5.4	130