Simon Akerman

List of Publications by Year
in descending order

90 papers	6,599 citations	61984 43 h-index	64796 79 g-index
90 all docs	90 docs citations	90 times ranked	4342 citing authors

#	Article	IF	Citations
1	Pathophysiology of Migraine: A Disorder of Sensory Processing. Physiological Reviews, 2017, 97, 553-622.	28.8	1,168
2	Diencephalic and brainstem mechanisms in migraine. Nature Reviews Neuroscience, 2011, 12, 570-584.	10.2	454
3	Neurobiology of migraine. Neuroscience, 2009, 161, 327-341.	2.3	318
4	Calcitonin gene-related peptide (CGRP) modulates nociceptive trigeminovascular transmission in the cat. British Journal of Pharmacology, 2004, 142, 1171-1181.	5.4	274
5	Nitric oxide synthase inhibitors can antagonize neurogenic and calcitonin gene-related peptide induced dilation of dural meningeal vessels. British Journal of Pharmacology, 2002, 137, 62-68.	5.4	145
6	Dopamine and Migraine: Biology and Clinical Implications. Cephalalgia, 2007, 27, 1308-1314.	3.9	136
7	Topiramate inhibits cortical spreading depression in rat and cat: impact in migraine aura. NeuroReport, 2005, 16, 1383-1387.	1.2	129
8	Anandamide Is Able to Inhibit Trigeminal Neurons Using an in Vivo Model of Trigeminovascular-Mediated Nociception. Journal of Pharmacology and Experimental Therapeutics, 2004, 309, 56-63.	2.5	123
9	Orexin 1 Receptor Activation Attenuates Neurogenic Dural Vasodilation in an Animal Model of Trigeminovascular Nociception. Journal of Pharmacology and Experimental Therapeutics, 2005, 315, 1380-1385.	2.5	122
10	Oxygen Inhibits Neuronal Activation in the Trigeminocervical Complex After Stimulation of Trigeminal Autonomic Reflex, But Not During Direct Dural Activation of Trigeminal Afferents. Headache, 2009, 49, 1131-1143.	3.9	122
11	Modulation of nociceptive dural input to the trigeminal nucleus caudalis via activation of the orexin 1 receptor in the rat. European Journal of Neuroscience, 2006, 24, 2825-2833.	2.6	119
12	Anandamide acts as a vasodilator of dural blood vessels in vivo by activating TRPV1 receptors. British Journal of Pharmacology, 2004, 142, 1354-1360.	5.4	112
13	Animal models of migraine: looking at the component parts of a complex disorder. European Journal of Neuroscience, 2006, 24, 1517-1534.	2.6	110
14	Neuronal PAC ₁ receptors mediate delayed activation and sensitization of trigeminocervical neurons: Relevance to migraine. Science Translational Medicine, 2015, 7, 308ra157.	12.4	109
15	Neurons of the Dopaminergic/Calcitonin Gene-Related Peptide A11 Cell Group Modulate Neuronal Firing in the Trigeminocervical Complex: An Electrophysiological and Immunohistochemical Study. Journal of Neuroscience, 2009, 29, 12532-12541.	3.6	105
16	Transcranial magnetic stimulation and potential cortical and trigeminothalamic mechanisms in migraine. Brain, 2016, 139, 2002-2014.	7.6	105
17	Dopamine: whatÊ¼s new in migraine?. Current Opinion in Neurology, 2010, 23, 275-281.	3.6	102
18	Hypothalamic activation after stimulation of the superior sagittal sinus in the cat: a Fos study. Neurobiology of Disease, 2004, 16, 500-505.	4.4	100

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19	Systemic antiangiogenic activity of cationic poly-L-lysine dendrimer delays tumor growth. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 3966-3971.	7.1	97
20	Cannabinoid (CB1) Receptor Activation Inhibits Trigeminovascular Neurons. Journal of Pharmacology and Experimental Therapeutics, 2007, 320, 64-71.	2.5	96
21	Acidâ€sensing ion channel 1: A novel therapeutic target for migraine with aura. Annals of Neurology, 2012, 72, 559-563.	5.3	95
22	Blood Vessel Maturation and Response to Vascular-Disrupting Therapy in Single Vascular Endothelial Growth Factor-A Isoformâ€“Producing Tumors. Cancer Research, 2008, 68, 2301-2311.	0.9	92
23	Endocannabinoids in the Brainstem Modulate Dural Trigeminovascular Nociceptive Traffic via CB₁and â€œTriptanâ€• Receptors: Implications in Migraine. Journal of Neuroscience, 2013, 33, 14869-14877.	3.6	91
24	Targeted Nitric Oxide Synthase Inhibitors for Migraine. Neurotherapeutics, 2018, 15, 391-401.	4.4	83
25	Voltage-dependent calcium channels are involved in neurogenic dural vasodilatation via a presynaptic transmitter release mechanism. British Journal of Pharmacology, 2003, 140, 558-566.	5.4	82
26	A translational in vivo model of trigeminal autonomic cephalalgias: therapeutic characterization. Brain, 2012, 135, 3664-3675.	7.6	82
27	Vanilloid type 1 receptors (VR1) on trigeminal sensory nerve fibres play a minor role in neurogenic dural vasodilatation, and are involved in capsaicinâ€induced dural dilation. British Journal of Pharmacology, 2003, 140, 718-724.	5.4	81
28	Neurovascular mechanisms of migraine and cluster headache. Journal of Cerebral Blood Flow and Metabolism, 2019, 39, 573-594.	4.3	72
29	Evidence for orexinergic mechanisms in migraine. Neurobiology of Disease, 2015, 74, 137-143.	4.4	71
30	Patterns of fos expression in the rostral medulla and caudal pons evoked by noxious craniovascular stimulation and periaqueductal gray stimulation in the cat. Brain Research, 2005, 1045, 1-11.	2.2	70
31	Topiramate inhibits trigeminovascular activation: an intravital microscopy study. British Journal of Pharmacology, 2005, 146, 7-14.	5.4	68
32	Occipital afferent activation of second order neurons in the trigeminocervical complex in rat. Neuroscience Letters, 2006, 403, 73-77.	2.1	68
33	A potential nitrergic mechanism of action for indomethacin, but not of other COX inhibitors: relevance to indomethacin-sensitive headaches. Journal of Headache and Pain, 2010, 11, 477-483.	6.0	66
34	Vagus nerve stimulation suppresses acute noxious activation of trigeminocervical neurons in animal models of primary headache. Neurobiology of Disease, 2017, 102, 96-104.	4.4	66
35	Nitroglycerine triggers triptan-responsive cranial allodynia and trigeminal neuronal hypersensitivity. Brain, 2019, 142, 103-119.	7.6	62
36	The effect of anti-migraine compounds on nitric oxide-induced dilation of dural meningeal vessels. European Journal of Pharmacology, 2002, 452, 223-228.	3.5	61

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37	Spontaneous Behavioral Responses in the Orofacial Region: A Model of Trigeminal Pain in Mouse. Headache, 2013, 53, 137-151.	3.9	54
38	Current and novel insights into the neurophysiology of migraine and its implications for therapeutics. , 2017, 172, 151-170.		54
39	Pearls and pitfalls in experimental inÂvivo models of migraine: Dural trigeminovascular nociception. Cephalalgia, 2013, 33, 577-592.	3.9	52
40	A potent and selective calcitonin gene-related peptide (CGRP) receptor antagonist, MK-8825, inhibits responses to nociceptive trigeminal activation: Role of CGRP in orofacial pain. Experimental Neurology, 2015, 271, 95-103.	4.1	51
41	Mechanically-induced cortical spreading depression associated regional cerebral blood flow changes are blocked by Na+ ion channel blockade. Brain Research, 2008, 1229, 27-36.	2.2	46
42	PACAP and migraine headache: immunomodulation of neural circuits in autonomic ganglia and brain parenchyma. Journal of Headache and Pain, 2018, 19, 23.	6.0	46
43	The trigeminovascular system does not require a peripheral sensory input to be activated â€" migraine is a central disorder Focus on â€˜Effect of cortical spreading depression on basal and evoked traffic in the trigeminovascular sensory systemâ€™. Cephalalgia, 2012, 32, 3-5.	3.9	44
44	Evidence for postjunctional serotonin (5-HT1) receptors in the trigeminocervical complex. Annals of Neurology, 2001, 50, 804-807.	5.3	43
45	Intravital Microscopy on a Closed Cranial Window in Mice: A Model to Study Trigeminovascular Mechanisms Involved in Migraine. Cephalalgia, 2006, 26, 1294-1303.	3.9	42
46	TRPV1 receptor blockade is ineffective in different inÂvivo models of migraine. Cephalalgia, 2011, 31, 172-180.	3.9	42
47	Cortical spreading depression-associated cerebral blood flow changes induced by mechanical stimulation are modulated by AMPA and GABA receptors. Cephalalgia, 2010, 30, 519-27.	3.9	41
48	Neuroendocrine signaling modulates specific neural networks relevant to migraine. Neurobiology of Disease, 2017, 101, 16-26.	4.4	40
49	Efficacy and mechanism of anticonvulsant drugs in migraine. Expert Review of Clinical Pharmacology, 2014, 7, 191-201.	3.1	39
50	PAC1 receptor blockade reduces central nociceptive activity: new approach for primary headache?. Pain, 2020, 161, 1670-1681.	4.2	39
51	Neuropeptide Y inhibits the trigeminovascular pathway through NPY Y1 receptor: implications for migraine. Pain, 2016, 157, 1666-1673.	4.2	37
52	GABA receptors modulate trigeminovascular nociceptive neurotransmission in the trigeminocervical complex. British Journal of Pharmacology, 2001, 134, 896-904.	5.4	36
53	Comparison of the Effects of Central and Peripheral Dopamine Receptor Activation on Evoked Firing in the Trigeminocervical Complex. Journal of Pharmacology and Experimental Therapeutics, 2009, 331, 752-763.	2.5	36
54	Trigeminocervical complex responses after lesioning dopaminergic A11 nucleus are modified by dopamine and serotonin mechanisms. Pain, 2011, 152, 2365-2376.	4.2	35

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55	Calcium channels modulate nociceptive transmission in the trigeminal nucleus of the cat. Neuroscience, 2005, 135, 203-212.	2.3	34
56	Metabotropic glutamate receptor 5: a target for migraine therapy. Annals of Clinical and Translational Neurology, 2016, 3, 560-571.	3.7	34
57	The role of histamine in dural vessel dilation. Brain Research, 2002, 956, 96-102.	2.2	32
58	Vascular effects dominate solid tumor response to treatment with combretastatin Aâ€4â€phosphate. International Journal of Cancer, 2011, 129, 1979-1989.	5.1	32
59	The effect of adrenergic compounds on neurogenic dural vasodilatation. European Journal of Pharmacology, 2001, 424, 53-58.	3.5	31
60	Inhibition of trigeminovascular dural nociceptive afferents by Ca2+-activated K+ (MaxiK/BKCa) channel opening. Pain, 2010, 151, 128-136.	4.2	28
61	Brain structure and function related to headache: Brainstem structure and function in headache. Cephalalgia, 2019, 39, 1635-1660.	3.9	26
62	Characterization of opioid receptors that modulate nociceptive neurotransmission in the trigeminocervical complex. British Journal of Pharmacology, 2003, 138, 317-324.	5.4	23
63	GABAA receptor modulation of trigeminovascular nociceptive neurotransmission by midazolam is antagonized by flumazenil. Brain Research, 2004, 1013, 188-193.	2.2	23
64	4991W93, a potent blocker of neurogenic plasma protein extravasation, inhibits trigeminal neurons at 5-hydroxytryptamine (5-HT1B/1D) agonist doses. Neuropharmacology, 2001, 40, 911-917.	4.1	22
65	The ORL-1 (NOP1) receptor ligand nociceptin/orphanin FQ (N/OFQ) inhibits neurogenic dural vasodilatation in the rat. Neuropharmacology, 2002, 43, 991-998.	4.1	21
66	Differential trigeminovascular nociceptive responses in the thalamus in the familial hemiplegic migraine 1 knock-in mouse: A Fos protein study. Neurobiology of Disease, 2014, 64, 1-7.	4.4	21
67	Targeting the central projection of the dural trigeminovascular system for migraine prophylaxis. Journal of Cerebral Blood Flow and Metabolism, 2019, 39, 704-717.	4.3	20
68	The Role of Dopamine in a Model of Trigeminovascular Nociception. Journal of Pharmacology and Experimental Therapeutics, 2005, 314, 162-169.	2.5	19
69	Comparative effects of traditional Chinese and Western migraine medicines in an animal model of nociceptive trigeminovascular activation. Cephalalgia, 2018, 38, 1215-1224.	3.9	19
70	Glia and Orofacial Pain: Progress and Future Directions. International Journal of Molecular Sciences, 2021, 22, 5345.	4.1	19
71	Insights into the pharmacological targeting of the trigeminocervical complex in the context of treatments of migraine. Expert Review of Neurotherapeutics, 2013, 13, 1041-1059.	2.8	18
72	Olvanil acts on transient receptor potential vanilloid channel 1 and cannabinoid receptors to modulate neuronal transmission in the trigeminovascular system. Pain, 2012, 153, 2226-2232.	4.2	17

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73	Differential actions of indomethacin: clinical relevance in headache. Pain, 2021, 162, 591-599.	4.2	17
74	Preclinical studies investigating the neural mechanisms involved in the coâ€morbidity of migraine and temporomandibular disorders: the role of CGRP. British Journal of Pharmacology, 2020, 177, 5555-5568.	5.4	16
75	Update on Animal Models of Migraine. Current Pain and Headache Reports, 2014, 18, 462.	2.9	15
76	Sex differences in the expression of calcitonin gene-related peptide receptor components in the spinal trigeminal nucleus. Neurobiology of Pain (Cambridge, Mass), 2019, 6, 100031.	2.5	13
77	Therapeutic targeting of nitroglycerin-mediated trigeminovascular neuronal hypersensitivity predicts clinical outcomes of migraine abortives. Pain, 2021, 162, 1567-1577.	4.2	12
78	Influence of soluble or matrix-bound isoforms of vascular endothelial growth factor-A on tumor response to vascular-targeted strategies. International Journal of Cancer, 2013, 133, n/a-n/a.	5.1	11
79	Characterization of opioidergic mechanisms related to the anti-migraine effect of vagus nerve stimulation. Neuropharmacology, 2021, 195, 108375.	4.1	11
80	A Novel Translational Animal Model of Trigeminal Autonomic Cephalalgias. Headache, 2015, 55, 197-203.	3.9	9
81	Targeting reactive nitroxidative species in preclinical models of migraine. Cephalalgia, 2021, 41, 1187-1200.	3.9	9
82	Online chromatic and scale-space microvessel-tracing analysis for transmitted light optical images. Microvascular Research, 2012, 84, 330-339.	2.5	5
83	Microflow of fluorescently labelled red blood cells in tumours expressing single isoforms of VEGF and their response to vascular targeting agents. Medical Engineering and Physics, 2011, 33, 805-809.	1.7	3
84	Devices for Episodic Migraine: Past, Present, and Future. Current Pain and Headache Reports, 2022, 26, 259-265.	2.9	3
85	KCl-induced repetitive cortical spreading depression inhibiting trigeminal neuronal firing is mediated by 5-HT_{1B/1D} and opioid receptors. Cephalalgia, 2022, 42, 1339-1348.	3.9	2
86	Animals Models for Trigeminal Autonomic Cephalalgias. Headache, 2020, , 103-115.	0.4	1
87	Increased affinity of platelet dopamine-binding to D₂-receptors in migraineurs: implications of the dopaminergic system in migraine. Future Neurology, 2009, 4, 291-294.	0.5	0
88	Response to Dr Elliot Shevelâ€™s comment on the Editorial â€˜The trigeminovascular system does not require a peripheral sensory input to be activatedâ€”migraine is a central disorderâ€™. Cephalalgia, 2012, 32, 1082-1083.	3.9	0
89	Animal Models of Tension-Type Headache and Trigeminal Autonomic Cephalalgias. Headache, 2015, , 67-82.	0.4	0
90	Vagus Nerve Stimulation. Headache, 2020, , 87-98.	0.4	0