Stefan Trapp

List of Publications by Year
in descending order

65 papers	5,011 citations	101543 36 h-index	102487 66 g-index
69 all docs	69 docs citations	69 times ranked	4286 citing authors

#	Article	IF	Citations
1	Truncation of Kir6.2 produces ATP-sensitive K+ channels in the absence of the sulphonylurea receptor. Nature, 1997, 387, 179-183.	27.8	723
2	Identification and Characterization of GLP-1 Receptorâ€"Expressing Cells Using a New Transgenic Mouse Model. Diabetes, 2014, 63, 1224-1233.	0.6	345
3	Distribution and characterisation of Glucagon-like peptide-1 receptor expressing cells in the mouse brain. Molecular Metabolism, 2015, 4, 718-731.	6.5	323
4	Molecular determinants of KATP channel inhibition by ATP. EMBO Journal, 1998, 17, 3290-3296.	7.8	208
5	Cardioprotection evoked by remote ischaemic preconditioning is critically dependent on the activity of vagal pre-ganglionic neurones. Cardiovascular Research, 2012, 95, 487-494.	3.8	187
6	Molecular Analysis of ATP-sensitive K Channel Gating and Implications for Channel Inhibition by ATP. Journal of General Physiology, 1998, 112, 333-349.	1.9	168
7	Preproglucagon neurons project widely to autonomic control areas in the mouse brain. Neuroscience, 2011, 180, 111-121.	2.3	159
8	Essential Role of Phox2b-Expressing Ventrolateral Brainstem Neurons in the Chemosensory Control of Inspiration and Expiration. Journal of Neuroscience, 2010, 30, 12466-12473.	3.6	136
9	Leptin Directly Depolarizes Preproglucagon Neurons in the Nucleus Tractus Solitarius. Diabetes, 2010, 59, 1890-1898.	0.6	127
10	A Role for TASK-1 (KCNK3) Channels in the Chemosensory Control of Breathing. Journal of Neuroscience, 2008, 28, 8844-8850.	3.6	124
11	Preproglucagon Neurons in the Nucleus of the Solitary Tract Are the Main Source of Brain GLP-1, Mediate Stress-Induced Hypophagia, and Limit Unusually Large Intakes of Food. Diabetes, 2019, 68, 21-33.	0.6	119
12	Revisiting the Complexity of GLP-1 Action from Sites of Synthesis to Receptor Activation. Endocrine Reviews, 2021, 42, 101-132.	20.1	115
13	Central and peripheral GLP-1 systems independently suppress eating. Nature Metabolism, 2021, 3, 258-273.	11.9	107
14	Optical control of insulin release using a photoswitchable sulfonylurea. Nature Communications, 2014, 5, 5116.	12.8	106
15	Neuronal responses to transient hypoglycaemia in the dorsal vagal complex of the rat brainstem. Journal of Physiology, 2006, 570, 469-484.	2.9	105
16	Super-resolution microscopy compatible fluorescent probes reveal endogenous glucagon-like peptide-1 receptor distribution and dynamics. Nature Communications, 2020, 11, 467.	12.8	88
17	Neuronal Preconditioning by Inhalational Anesthetics. Anesthesiology, 2009, 110, 986-995.	2.5	84
18	Acidosis of hippocampal neurones mediated by a plasmalemmal Ca2+/H+ pump. NeuroReport, 1996, 7, 2000-2004.	1.2	82

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19	Control of ventricular excitability by neurons of the dorsal motor nucleus of the vagus nerve. Heart Rhythm, 2015, 12, 2285-2293.	0.7	82
20	CCK Stimulation of GLP-1 Neurons Involves Î±1-Adrenoceptorâ€"Mediated Increase in Glutamatergic Synaptic Inputs. Diabetes, 2011, 60, 2701-2709.	0.6	78
21	The gut hormone glucagon-like peptide-1 produced in brain: is this physiologically relevant?. Current Opinion in Pharmacology, 2013, 13, 964-969.	3.5	77
22	Identification of residues contributing to the ATP binding site of Kir6.2. EMBO Journal, 2003, 22, 2903-2912.	7.8	74
23	KATP channel mediation of anoxiaâ€induced outward current in rat dorsal vagal neurons in vitro.. Journal of Physiology, 1995, 487, 37-50.	2.9	69
24	PPG neurons of the lower brain stem and their role in brain GLP-1 receptor activation. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2015, 309, R795-R804.	1.8	64
25	Cardiac vagal preganglionic neurones: An update. Autonomic Neuroscience: Basic and Clinical, 2016, 199, 24-28.	2.8	64
26	Acidosis of rat dorsal vagal neurons in situ during spontaneous and evoked activity.. Journal of Physiology, 1996, 496, 695-710.	2.9	63
27	Activation and inhibition of K-ATP currents by guanine nucleotides is mediated by different channel subunits. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 8872-8877.	7.1	60
28	Vagal determinants of exercise capacity. Nature Communications, 2017, 8, 15097.	12.8	55
29	Noble Gas Xenon Is a Novel Adenosine Triphosphate-sensitive Potassium Channel Opener. Anesthesiology, 2010, 112, 623-630.	2.5	55
30	Preproglucagon (PPG) neurons innervate neurochemicallyidentified autonomic neurons in the mouse brainstem. Neuroscience, 2013, 229, 130-143.	2.3	52
31	Brain GLPâ€1 and the regulation of food intake: GLPâ€1 action in the brain and its implications for GLPâ€1 receptor agonists in obesity treatment. British Journal of Pharmacology, 2022, 179, 557-570.	5.4	46
32	The incretin hormone glucagonâ€like peptide 1 increases mitral cell excitability by decreasing conductance of a voltageâ€dependent potassium channel. Journal of Physiology, 2016, 594, 2607-2628.	2.9	43
33	The role of the autonomic nervous system in acute surgical pain processing - what do we know?. Anaesthesia, 2011, 66, 541-544.	3.8	41
34	Respiratory responses to hypercapnia and hypoxia in mice with genetic ablation of Kir5.1 (<i>Kcnj16</i>). Experimental Physiology, 2011, 96, 451-459.	2.0	41
35	Functional Analysis of a Mutant Sulfonylurea Receptor, SUR1-R1420C, That Is Responsible for Persistent Hyperinsulinemic Hypoglycemia of Infancy. Journal of Biological Chemistry, 2000, 275, 41184-41191.	3.4	40
36	Limited impact on glucose homeostasis of leptin receptor deletion from insulin- or proglucagon-expressing cells. Molecular Metabolism, 2015, 4, 619-630.	6.5	40

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37	GLP-1 action in the mouse bed nucleus of the stria terminalis. Neuropharmacology, 2018, 131, 83-95.	4.1	39
38	Altered functional properties of KATPchannel conferred by a novel splice variant of SUR1. Journal of Physiology, 1999, 521, 337-350.	2.9	38
39	Dominant Negative Effects of a Non-conducting TREK1 Splice Variant Expressed in Brain*. Journal of Biological Chemistry, 2010, 285, 29295-29304.	3.4	37
40	Endogenous GLP-1 in lateral septum promotes satiety and suppresses motivation for food in mice. Physiology and Behavior, 2019, 206, 191-199.	2.1	37
41	Mechanism of ATP-sensitive K Channel Inhibition by Sulfhydryl Modification. Journal of General Physiology, 1998, 112, 325-332.	1.9	35
42	The physiological role of the brain GLP-1 system in stress. Cogent Biology, 2016, 2, 1229086.	1.7	35
43	Ischemia But Not Anoxia Evokes Vesicular and Ca2+-Independent Glutamate Release In the Dorsal Vagal Complex In Vitro. Journal of Neurophysiology, 2000, 83, 2905-2915.	1.8	33
44	GABA- and Glycine-Mediated Fall of Intracellular pH in Rat Medullary Neurons In Situ. Journal of Neurophysiology, 1997, 77, 1844-1852.	1.8	32
45	Glucagon-like peptide-1 (GLP-1) receptor activation dilates cerebral arterioles, increases cerebral blood flow, and mediates remote (pre)conditioning neuroprotection against ischaemic stroke. Basic Research in Cardiology, 2021, 116, 32.	5.9	32
46	Ionic currents underlying the response of rat dorsal vagal neurones to hypoglycaemia and chemical anoxia. Journal of Physiology, 2007, 579, 691-702.	2.9	28
47	Glucagon-like peptide 1 and the brain: Central actionsâ€"central sources?. Autonomic Neuroscience: Basic and Clinical, 2011, 161, 14-19.	2.8	28
48	Spinally projecting preproglucagon axons preferentially innervate sympathetic preganglionic neurons. Neuroscience, 2015, 284, 872-887.	2.3	27
49	GLPâ€1 neurons form a local synaptic circuit within the rodent nucleus of the solitary tract. Journal of Comparative Neurology, 2018, 526, 2149-2164.	1.6	27
50	TASK-like K+channels mediate effects of 5-HT and extracellular pH in rat dorsal vagal neuronesin vitro. Journal of Physiology, 2005, 568, 145-154.	2.9	24
51	A unique olfactory bulb microcircuit driven by neurons expressing the precursor to glucagon-like peptide 1. Scientific Reports, 2019, 9, 15542.	3.3	24
52	Spontaneous activation of KATP current in rat dorsal vagal neurones. NeuroReport, 1994, 5, 1285-1288.	1.2	23
53	Serotonergic modulation of the activity of GLP-1 producing neurons in the nucleus of the solitary tract in mouse. Molecular Metabolism, 2017, 6, 909-921.	6.5	22
54	Preproglucagon neurons in the hindbrain have IL-6 receptor-Î± and show Ca2+ influx in response to IL-6. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2016, 311, R115-R123.	1.8	21

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55	PPG neurons in the nucleus of the solitary tract modulate heart rate but do not mediate GLP-1 receptor agonist-induced tachycardia in mice. Molecular Metabolism, 2020, 39, 101024.	6.5	20
56	Pyridine nucleotide regulation of the K ATP channel Kir6.2/SUR1 expressed in Xenopus oocytes. Journal of Physiology, 2003, 550, 357-363.	2.9	15
57	Autonomic Nervous System In Vitro: Studying Tonically Active Neurons Controlling Vagal Outflow in Rodent Brainstem Slices. Neuromethods, 2012, , 1-59.	0.3	15
58	Characterization of two novel forms of the rat sulphonylurea receptor SUR1A2 and SUR1BÎ”31. British Journal of Pharmacology, 2002, 137, 98-106.	5.4	13
59	The Peutz-Jeghers kinase LKB1 suppresses polyp growth from intestinal cells of a proglucagon-expressing lineage. DMM Disease Models and Mechanisms, 2014, 7, 1275-86.	2.4	10
60	Direct interaction of Na-azide with the KATP channel. British Journal of Pharmacology, 2000, 131, 1105-1112.	5.4	8
61	Inhibition of recombinant KATP channels by the antidiabetic agents midaglizole, LY397364 and LY389382. European Journal of Pharmacology, 2002, 452, 11-19.	3.5	8
62	New developments in the prospects for GLPâ€1 therapy. British Journal of Pharmacology, 2022, 179, 489-491.	5.4	7
63	A Metabolic Sensor in Action: News From the ATP-Sensitive K+-Channel. Physiology, 1997, 12, 255-263.	3.1	6
64	Glucagon-Like Peptide-1-, but not Growth and Differentiation Factor 15-, Receptor Activation Increases the Number of Interleukin-6-Expressing Cells in the External Lateral Parabrachial Nucleus. Neuroendocrinology, 2019, 109, 310-321.	2.5	5
65	New horizons for future research â€“ Critical issues to consider for maximizing research excellence and impact. Molecular Metabolism, 2018, 14, 53-59.	6.5	3