Joachim W Deitmer

List of Publications by Year
in descending order

45	2,230	218677	233421
papers	citations	26 h-index	45 g-index

46	46	46	2430
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	pH regulation and proton signalling by glial cells. Progress in Neurobiology, 1996, 48, 73-103.	5.7	289
2	Glucose and lactate supply to the synapse. Brain Research Reviews, 2010, 63, 149-159.	9.0	139
3	Glutamine efflux from astrocytes is mediated by multiple pathways. Journal of Neurochemistry, 2003, 87, 127-135.	3.9	115
4	Carbonic Anhydrase II Increases the Activity of the Human Electrogenic Na+/ HCO3- Cotransporter. Journal of Biological Chemistry, 2007, 282, 13508-13521.	3.4	113
5	Hypoxia-induced carbonic anhydrase IX facilitates lactate flux in human breast cancer cells by non-catalytic function. Scientific Reports, 2015, 5, 13605.	3.3	109
6	Higher Transport and Metabolism of Glucose in Astrocytes Compared with Neurons: A Multiphoton Study of Hippocampal and Cerebellar Tissue Slices. Cerebral Cortex, 2014, 24, 222-231.	2.9	91
7	Facilitated Lactate Transport by MCT1 when Coexpressed with the Sodium Bicarbonate Cotransporter (NBC) in Xenopus Oocytes. Biophysical Journal, 2004, 86, 235-247.	0.5	86
8	Ion changes and signalling in perisynaptic glia. Brain Research Reviews, 2010, 63, 113-129.	9.0	85
9	Energy Dynamics in the Brain: Contributions of Astrocytes to Metabolism and pH Homeostasis. Frontiers in Neuroscience, 2019, 13, 1301.	2.8	77
10	Strategies for metabolic exchange between glial cells and neurons. Respiration Physiology, 2001, 129, 71-81.	2.7	63
11	Lactate flux in astrocytes is enhanced by a nonâ€catalytic action of carbonic anhydrase II. Journal of Physiology, 2012, 590, 2333-2351.	2.9	63
12	Tight coupling of astrocyte energy metabolism to synaptic activity revealed by genetically encoded FRET nanosensors in hippocampal tissue. Journal of Cerebral Blood Flow and Metabolism, 2019, 39, 513-523.	4.3	58
13	The Electrogenic Sodium Bicarbonate Cotransporter NBCe1 Is a High-Affinity Bicarbonate Carrier in Cortical Astrocytes. Journal of Neuroscience, 2014, 34, 1148-1157.	3.6	55
14	Targeting of astrocytic glucose metabolism by beta-hydroxybutyrate. Journal of Cerebral Blood Flow and Metabolism, 2016, 36, 1813-1822.	4.3	54
15	A surface proton antenna in carbonic anhydrase II supports lactate transport in cancer cells. ELife, 2018, 7, .	6.0	53
16	Evidence for glial control of extracellular pH in the leech central nervous system. Glia, 1992, 5, 43-47.	4.9	50
17	Neuronal control of astrocytic respiration through a variant of the Crabtree effect. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 1623-1628.	7.1	48
18	H95 Is a pH-Dependent Gate in Aquaporin 4. Structure, 2015, 23, 2309-2318.	3.3	47

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19	Carbonic Anhydrases and Their Interplay with Acid/Base-Coupled Membrane Transporters. Sub-Cellular Biochemistry, 2014, 75, 105-134.	2.4	43
20	Glycine-activated currents are changed by coincident membrane depolarization in developing rat auditory brainstem neurones. Journal of Physiology, 1998, 507, 783-794.	2.9	42
21	Reversed electrogenic sodium bicarbonate cotransporterÂ1 is the major acid loader during recovery from cytosolic alkalosis in mouse cortical astrocytes. Journal of Physiology, 2015, 593, 3533-3547.	2.9	42
22	Transport Activity of the Sodium Bicarbonate Cotransporter NBCe1 Is Enhanced by Different Isoforms of Carbonic Anhydrase. PLoS ONE, 2011, 6, e27167.	2.5	39
23	Voltage Dependence of H+ Buffering Mediated by Sodium Bicarbonate Cotransport Expressed in Xenopus Oocytes. Journal of Biological Chemistry, 2004, 279, 28057-28062.	3.4	37
24	A role for CO2 and bicarbonate transporters in metabolic exchanges in the brain. Journal of Neurochemistry, 2002, 80, 721-726.	3.9	34
25	Transport metabolons with carbonic anhydrases. Frontiers in Physiology, 2013, 4, 291.	2.8	32
26	Analysis of the Binding Moiety Mediating the Interaction between Monocarboxylate Transporters and Carbonic Anhydrase II. Journal of Biological Chemistry, 2015, 290, 4476-4486.	3.4	30
27	High effective cytosolic H⁺ buffering in mouse cortical astrocytes attributable to fast bicarbonate transport. Glia, 2015, 63, 1581-1594.	4.9	29
28	Aquaporin 4 as a NH3 Channel. Journal of Biological Chemistry, 2016, 291, 19184-19195.	3.4	27
29	Inhibition of monocarboxylate transporter by N-cyanosulphonamide S0859. European Journal of Pharmacology, 2015, 762, 344-349.	3.5	26
30	Proton Fall or Bicarbonate Rise. Journal of Biological Chemistry, 2016, 291, 19108-19117.	3.4	21
31	Transport Metabolons and Acid/Base Balance in Tumor Cells. Cancers, 2020, 12, 899.	3.7	21
32	Acid/base transport across the leech giant glial cell membrane at low external bicarbonate concentration. Journal of Physiology, 1998, 512, 459-469.	2.9	20
33	Integration of a â€˜proton antennaâ€™ facilitates transport activity of the monocarboxylate transporter MCT4. FEBS Journal, 2017, 284, 149-162.	4.7	20
34	Bicarbonate sensing in mouse cortical astrocytes during extracellular acid/base disturbances. Journal of Physiology, 2017, 595, 2569-2585.	2.9	19
35	Proton Transport in Cancer Cells: The Role of Carbonic Anhydrases. International Journal of Molecular Sciences, 2021, 22, 3171.	4.1	19
36	Reduction of epileptiform activity in ketogenic mice: The role of monocarboxylate transporters. Scientific Reports, 2017, 7, 4900.	3.3	18

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37	The role of membrane acid/base transporters and carbonic anhydrases for cellular pH and metabolic processes. Frontiers in Neuroscience, 2014, 8, 430.	2.8	17
38	TGFâ€Î² signaling directly regulates transcription and functional expression of the electrogenic sodium bicarbonate cotransporter 1, NBCe1 (SLC4A4), via Smad4 in mouse astrocytes. Glia, 2017, 65, 1361-1375.	4.9	15
39	Regulation of functional expression of the electrogenic sodium bicarbonate cotransporter 1, NBCe1 (SLC4A4), in mouse astrocytes. Glia, 2015, 63, 1226-1239.	4.9	13
40	The inhibitory input to mouse cerebellar Purkinje cells is reciprocally modulated by Bergmann glial P2Y1 and AMPA receptor signaling. Glia, 2016, 64, 1265-1280.	4.9	13
41	Cytosolic sodium regulation in mouse cortical astrocytes and its dependence on potassium and bicarbonate. Journal of Cellular Physiology, 2019, 234, 89-99.	4.1	13
42	Catalytically inactive carbonic anhydraseâ€related proteins enhance transport of lactate by MCT1. FEBS Open Bio, 2019, 9, 1204-1211.	2.3	13
43	14-3-3 Proteins and Other Candidates form Protein-Protein Interactions with the Cytosolic C-terminal End of SOS1 Affecting Its Transport Activity. International Journal of Molecular Sciences, 2020, 21, 3334.	4.1	13
44	Selective inhibition of human carbonic anhydrase IX inXenopusoocytes and MDA-MB-231 breast cancer cells. Journal of Enzyme Inhibition and Medicinal Chemistry, 2016, 31, 38-44.	5.2	10
45	Functional expression of electrogenic sodium bicarbonate cotransporter 1 (NBCe1) in mouse cortical astrocytes is dependent on S255â€257 and regulated by mTOR. Glia, 2019, 67, 2264-2278.	4.9	9