

CITATION REPORT

List of articles citing

Delayed K⁺ clearance associated with aquaporin-4 mislocalization: phenotypic defects in brains of alpha-syntrophin-null mice

DOI: 10.1073/pnas.2336064100

Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 13615-20.

Source: <https://exaly.com/paper-pdf/35728647/citation-report.pdf>

Version: 2024-04-28

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
312	The molecular basis of water transport in the brain. 2003 , 4, 991-1001		583
311	Aquaporin-4 square array assembly: opposing actions of M1 and M23 isoforms. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003 , 100, 13609-14	11.5	246
310	Aquaporin-4 gene disruption in mice protects against impaired retinal function and cell death after ischemia. 2004 , 45, 4477-83		109
309	Differential assembly of inwardly rectifying K ⁺ channel subunits, Kir4.1 and Kir5.1, in brain astrocytes. 2004 , 279, 44065-73		125
308	The potassium channel Kir4.1 associates with the dystrophin-glycoprotein complex via alpha-syntrophin in glia. 2004 , 279, 28387-92		148
307	In vivo expression of aquaporin-4 by reactive microglia. 2004 , 91, 891-9		56
306	Syntrophin is an actin-binding protein the cellular localization of which is regulated through cytoskeletal reorganization in skeletal muscle cells. 2004 , 83, 555-65		23
305	Aquaporin-4 is increased in the sclerotic hippocampus in human temporal lobe epilepsy. 2004 , 108, 493-502		107
304	Laminin-induced aggregation of the inwardly rectifying potassium channel, Kir4.1, and the water-permeable channel, AQP4, via a dystroglycan-containing complex in astrocytes. 2004 , 47, 138-49		99
303	Altered blood-brain barrier development in dystrophic MDX mice. 2004 , 125, 921-35		73
302	From finch to fish to man: role of aquaporins in body fluid and brain water regulation. 2004 , 129, 897-904		23
301	Water transport in the brain: role of cotransporters. 2004 , 129, 1031-44		86
300	The role of utrophin and Dp71 for assembly of different dystrophin-associated protein complexes (DPCs) in the choroid plexus and microvasculature of the brain. 2004 , 129, 403-13		62
299	New insights into water transport and edema in the central nervous system from phenotype analysis of aquaporin-4 null mice. 2004 , 129, 983-91		243
298	The role of aquaporin-4 in the blood-brain barrier development and integrity: studies in animal and cell culture models. 2004 , 129, 935-45		165
297	Regulation of brain aquaporins. 2004 , 129, 947-55		104
296	Anchoring of aquaporin-4 in brain: molecular mechanisms and implications for the physiology and pathophysiology of water transport. 2004 , 129, 999-1010		202

295	Aquaporin-4 in the central nervous system: cellular and subcellular distribution and coexpression with KIR4.1. 2004 , 129, 905-13	385
294	The neurobiology of glia in the context of water and ion homeostasis. 2004 , 129, 877-96	439
293	Towards a molecular understanding of water homeostasis in the brain. 2004 , 129, 849-50	60
292	Molecular mechanisms and drug development in aquaporin water channel diseases: aquaporins in the brain. 2004 , 96, 264-70	18
291	Diversity of aquaporin mRNA expressed by rat and human retinas. 2005 , 16, 53-6	46
290	Aquaporin 4 is increased in association with human immunodeficiency virus dementia: implications for disease pathogenesis. 2005 , 11, 535-43	31
289	Regulation of brain water: is there a role for aquaporins in epilepsy?. 2005 , 5, 104-6	14
288	K ⁺ waves in brain cortex visualized using a long-wavelength K ⁺ -sensing fluorescent indicator. 2005 , 2, 825-7	189
287	Water homeostasis in the ischaemic retina: is aquaporin-4 involved?. 2005 , 83, 523-5	3
286	Neuronal versus glial cell swelling in the ischaemic retina. 2005 , 83, 528-38	87
285	Aquaporins as targets for drug discovery. 2005 , 10, 485-93	93
284	Potassium homeostasis in the ischemic brain. 2005 , 50, 407-16	109
283	Distribution of Aquaporin 4 in rodent spinal cord: relationship with astrocyte markers and chondroitin sulfate proteoglycans. 2005 , 51, 148-59	50
282	Sulforaphane enhances aquaporin-4 expression and decreases cerebral edema following traumatic brain injury. 2005 , 82, 499-506	136
281	Sex- and region-specific alterations of basal amino acid and monoamine metabolism in the brain of aquaporin-4 knockout mice. 2005 , 82, 458-64	91
280	Redistribution of the water channel protein aquaporin-4 and the K ⁺ channel protein Kir4.1 differs in low- and high-grade human brain tumors. 2005 , 109, 418-26	94
279	Enhanced expression of aquaporin 4 in human brain with inflammatory diseases. 2005 , 110, 281-8	62
278	Phobic memory and somatic vulnerabilities in anorexia nervosa: a necessary unity?. 2005 , 4, 15	3

277	Loss of perivascular aquaporin 4 may underlie deficient water and K ⁺ homeostasis in the human epileptogenic hippocampus. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005 , 102, 1193-8	11.5	204
276	Water channels (aquaporins) and their role for postnatal adaptation. 2005 , 57, 47R-53R		52
275	New possible roles for aquaporin-4 in astrocytes: cell cytoskeleton and functional relationship with connexin43. 2005 , 19, 1674-6		132
274	A developmental switch in the expression of aquaporin-4 and Kir4.1 from horizontal to Müller cells in mouse retina. 2005 , 46, 3869-75		31
273	Novel roles of aquaporins revealed by phenotype analysis of knockout mice. 2005 , 155, 31-55		83
272	Reviews of Physiology Biochemistry and Pharmacology. 2005 ,		
271	Lead induces increased water permeability in astrocytes expressing aquaporin 4. 2005 , 136, 105-14		69
270	Cell biology of the neurovascular unit: implications for drug delivery across the blood-brain barrier. 2005 , 3, 89-95		38
269	More than just water channels: unexpected cellular roles of aquaporins. 2005 , 118, 3225-32		466
268	Postembedding Immunogold Cytochemistry of Membrane Molecules and Amino Acid Transmitters in the Central Nervous System. 2006 , 72-108		16
267	Progesterone administration modulates AQP4 expression and edema after traumatic brain injury in male rats. 2006 , 198, 469-78		173
266	Three distinct roles of aquaporin-4 in brain function revealed by knockout mice. 2006 , 1758, 1085-93		228
265	Impaired pain sensation in mice lacking Aquaporin-1 water channels. 2006 , 341, 1022-8		66
264	Differential effect of alpha-syntrophin knockout on aquaporin-4 and Kir4.1 expression in retinal macroglial cells in mice. 2006 , 137, 165-75		45
263	Aquaporin 4 changes in rat brain with severe hydrocephalus. 2006 , 23, 2929-36		74
262	Progressive loss of a glial potassium channel (KCNJ10) in the spinal cord of the SOD1 (G93A) transgenic mouse model of amyotrophic lateral sclerosis. 2006 , 99, 900-12		70
261	Astrocyte dysfunction in neurological disorders: a molecular perspective. 2006 , 7, 194-206		591
260	Kv7/KCNQ/M-channels in rat glutamatergic hippocampal axons and their role in regulation of excitability and transmitter release. 2006 , 576, 235-56		103

259	Increased expression of water channel aquaporin 1 and aquaporin 4 in Creutzfeldt-Jakob disease and in bovine spongiform encephalopathy-infected bovine-PrP transgenic mice. 2006 , 112, 573-85	63
258	Potassium channel Kir4.1 macromolecular complex in retinal glial cells. 2006 , 53, 124-31	68
257	Gene regulation by IL-1beta independent of IL-1R1 in the mouse brain. 2006 , 53, 477-83	24
256	Increased seizure duration and slowed potassium kinetics in mice lacking aquaporin-4 water channels. 2006 , 53, 631-6	277
255	Assembly of a perivascular astrocyte protein scaffold at the mammalian blood-brain barrier is dependent on alpha-syntrophin. 2006 , 53, 879-90	61
254	Functional changes in astroglial cells in epilepsy. 2006 , 54, 358-68	244
253	Brain Edema XIII. 2006 ,	7
252	Genetic and physiological evidence that oligodendrocyte gap junctions contribute to spatial buffering of potassium released during neuronal activity. 2006 , 26, 10984-91	139
251	Cerebellar synaptic defects and abnormal motor behavior in mice lacking alpha- and beta-dystrobrevin. 2006 , 26, 2841-51	77
250	Temporary loss of perivascular aquaporin-4 in neocortex after transient middle cerebral artery occlusion in mice. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006 , 103, 13532-6	11.5 136
249	Chronic liver disease is triggered by taurine transporter knockout in the mouse. 2006 , 20, 574-6	89
248	Abnormalities in the pattern of AQP4 immunoreactivity. 2006 , 20, 2423-4; author reply 2425	2
247	Evidence against functional interaction between aquaporin-4 water channels and Kir4.1 potassium channels in retinal Müller cells. 2007 , 282, 21866-72	92
246	A review of progress in understanding the pathophysiology and treatment of brain edema. 2007 , 22, E1	190
245	Aquaporins as targets for drug discovery. 2007 , 13, 2421-7	57
244	Aquaporin-1 channel function is positively regulated by protein kinase C. 2007 , 282, 20933-40	65
243	Expression and functional characterization of transient receptor potential vanilloid-related channel 4 (TRPV4) in rat cortical astrocytes. 2007 , 148, 876-92	142
242	Alterations of striatal neurotransmitter release in aquaporin-4 deficient mice: An in vivo microdialysis study. 2007 , 422, 175-80	29

241	Acquired Epilepsy: Cellular and Molecular Mechanisms. 2007 , 347-370	2
240	Downregulation of Kir4.1 inward rectifying potassium channel subunits by RNAi impairs potassium transfer and glutamate uptake by cultured cortical astrocytes. 2007 , 55, 274-81	166
239	Effects of agrin on the expression and distribution of the water channel protein aquaporin-4 and volume regulation in cultured astrocytes. 2007 , 26, 2109-18	64
238	Distinct detergent-resistant membrane microdomains (lipid rafts) respectively harvest K(+) and water transport systems in brain astroglia. 2007 , 26, 2539-55	40
237	Functional down-regulation of volume-regulated anion channels in AQP4 knockdown cultured rat cortical astrocytes. 2007 , 100, 87-104	53
236	Distribution of potassium ion and water permeable channels at perivascular glia in brain and retina of the Large(myd) mouse. 2007 , 103, 1940-53	27
235	Kir4.1 channels regulate swelling of astroglial processes in experimental spinal cord edema. 2007 , 103, 2620-8	45
234	Aquaporin expression in the cerebral cortex is increased at early stages of Alzheimer disease. 2007 , 1128, 164-74	72
233	Expression patterns of MLC1 protein in the central and peripheral nervous systems. 2007 , 26, 532-45	45
232	[Neuromyelitis optica]. 2007 , 78, 1365-77	6
231	Aquaporins in the brain: from aqueduct to "multi-duct". 2007 , 22, 251-63	62
230	Identification of a molecular target for glutamate regulation of astrocyte water permeability. 2008 , 56, 587-96	120
229	Dystrophin-dependent and -independent AQP4 pools are expressed in the mouse brain. 2008 , 56, 869-76	52
228	Lack of sex-linked differences in cerebral edema and aquaporin-4 expression after experimental stroke. 2008 , 28, 1898-906	22
227	Astrocytic function and its alteration in the epileptic brain. 2008 , 49 Suppl 2, 3-12	90
226	Glutamate and astrocytes--key players in human mesial temporal lobe epilepsy?. 2008 , 49 Suppl 2, 42-52	113
225	Functional implications for Kir4.1 channels in glial biology: from K+ buffering to cell differentiation. 2008 , 107, 589-601	224
224	Functions of aquaporins in the eye. 2008 , 27, 420-33	138

223	Neuromyelitis optica pathogenesis and aquaporin 4. 2008 , 5, 22	108
222	Aquaporin-4-deficient mice have increased extracellular space without tortuosity change. 2008 , 28, 5460-4	112
221	Aquaporin-4 independent Kir4.1 K+ channel function in brain glial cells. 2008 , 37, 1-10	89
220	Astrocytes in the epileptic brain. 2008 , 58, 168-78	289
219	Water movements in the brain: role of aquaporins. 2008 , 31, 37-43	257
218	Potential utility of aquaporin modulators for therapy of brain disorders. 2008 , 170, 589-601	72
217	Mammalian aquaporins: diverse physiological roles and potential clinical significance. 2008 , 10, e13	106
216	Mechanisms of disease: aquaporin-4 antibodies in neuromyelitis optica. 2008 , 4, 202-14	240
215	Glial cell aquaporin-4 overexpression in transgenic mice accelerates cytotoxic brain swelling. 2008 , 283, 15280-6	134
214	Impaired olfaction in mice lacking aquaporin-4 water channels. 2008 , 22, 3216-23	82
213	Potassium dynamics in the epileptic cortex: new insights on an old topic. 2008 , 14, 422-33	129
212	Recurrent seizures and brain pathology after inhibition of glutamine synthetase in the hippocampus in rats. 2008 , 131, 2061-70	111
211	The perivascular pool of aquaporin-4 mediates the effect of osmotherapy in postischemic cerebral edema. 2008 , 36, 2634-40	57
210	Altered blood-brain barrier integrity in adult aquaporin-4 knockout mice. 2008 , 19, 1-5	105
209	Scaffolding Proteins in Transport Regulation. 2008 , 325-341	0
208	Astrocytic plasticity and patterned oxytocin neuronal activity: dynamic interactions. 2009 , 29, 1743-54	75
207	Knock-out models reveal new aquaporin functions. 2009 , 359-81	75
206	Interdependence of laminin-mediated clustering of lipid rafts and the dystrophin complex in astrocytes. 2009 , 284, 19694-704	30

205	Role of aquaporin-4 in cerebral edema and stroke. 2009 , 159-70	205
204	Cellular elements of the blood-brain barrier. 2009 , 34, 2067-77	112
203	Phenotypic characteristics of temporal lobe epilepsy: the impact of hippocampal sclerosis. 2009 , 120, 8-13	13
202	Structural association of astrocytes with neurons and vasculature: Defining territorial boundaries. 2009 , 251-286	5
201	Vascular amyloid alters astrocytic water and potassium channels in mouse models and humans with Alzheimer's disease. 2009 , 159, 1055-69	169
200	AQP4 gene deletion in mice does not alter blood-brain barrier integrity or brain morphology. 2009 , 161, 764-72	97
199	Modulation of Kir4.1 and Kir4.1-Kir5.1 channels by small changes in cell volume. 2009 , 457, 80-4	26
198	Activity-dependent glial swelling is impaired in aquaporin-4 knockout mice. 2009 , 64, 208-12	40
197	Discovery of the aquaporins and development of the field. 2009 , 3-28	152
196	Aquaporins. 2009 ,	8
195	Immunotherapy, vascular pathology, and microhemorrhages in transgenic mice. 2009 , 8, 50-64	69
194	Differential water permeability and regulation of three aquaporin 4 isoforms. 2010 , 67, 829-40	87
193	Astrocyte dysfunction in epilepsy. 2010 , 63, 212-21	186
192	Astroglial loss and edema formation in the rat piriform cortex and hippocampus following pilocarpine-induced status epilepticus. 2010 , 518, 4612-28	71
191	MAPK induces AQP1 expression in astrocytes following injury. 2010 , 58, 209-17	31
190	Deletion of aquaporin-4 renders retinal glial cells more susceptible to osmotic stress. 2010 , 88, 2877-88	35
189	Variants of the genes encoding AQP4 and Kir4.1 are associated with subgroups of patients with temporal lobe epilepsy. 2010 , 88, 55-64	77
188	Glial dystrophin-associated proteins, laminin and agrin, are downregulated in the brain of mdx mouse. 2010 , 90, 1645-60	27

187	How hardwired is the brain? Technological advances provide new insight into brain malleability and neurotransmission. 2010 , 68 Suppl 2, S60-4	2
186	Differential expression of utrophin-A and -B promoters in the central nervous system (CNS) of normal and dystrophic mdx mice. 2010 , 20, 323-42	14
185	Components of the basal lamina and dystrophin-dystroglycan complex in the neurointermediate lobe of rat pituitary gland: different localizations of beta-dystroglycan, dystrobrevins, alpha1-syntrophin, and aquaporin-4. 2010 , 58, 463-79	6
184	The alpha-syntrophin PH and PDZ domains scaffold acetylcholine receptors, utrophin, and neuronal nitric oxide synthase at the neuromuscular junction. 2010 , 30, 11004-10	24
183	Aquaporin and blood brain barrier. 2010 , 8, 92-6	40
182	Aquaporins in sensory and pain transmission. 2010 , 8, 122-7	10
181	Aquaporins: relevance to cerebrospinal fluid physiology and therapeutic potential in hydrocephalus. 2010 , 7, 15	54
180	Regulation of brain aquaporins. 2010 , 57, 468-88	102
179	Role of aquaporin-4 in the development of brain oedema in liver failure. 2010 , 53, 91-7	41
178	Aquaporin-4 in brain and spinal cord oedema. 2010 , 168, 1036-46	136
177	Water transport between CNS compartments: contributions of aquaporins and cotransporters. 2010 , 168, 941-56	152
176	Functional and molecular interactions between aquaporins and Na,K-ATPase. 2010 , 168, 915-25	69
175	Brain volume regulation: osmolytes and aquaporin perspectives. 2010 , 168, 871-84	72
174	Water transport between CNS compartments: functional and molecular interactions between aquaporins and ion channels. 2010 , 168, 926-40	70
173	Aquaporins: multifarious roles in brain. 2010 , 168, 859-61	15
172	Effects of Aquaporin-4 on edema formation following intracerebral hemorrhage. 2010 , 223, 485-95	64
171	Increased NKCC1 expression in arachnoid cysts supports secretory basis for cyst formation. 2010 , 224, 424-8	28
170	Inwardly rectifying potassium channels: their structure, function, and physiological roles. 2010 , 90, 291-366	990

169	Aquaporin-4: orthogonal array assembly, CNS functions, and role in neuromyelitis optica. 2011 , 32, 702-10	51
168	Development of a Novel Ligand, [C]TGN-020, for Aquaporin 4 Positron Emission Tomography Imaging. 2011 , 2, 568-571	22
167	Laminar-specific and developmental expression of aquaporin-4 in the mouse hippocampus. 2011 , 178, 21-32	54
166	Loss of astrocyte polarization in the tg-ArcSwe mouse model of Alzheimer's disease. 2011 , 27, 711-22	121
165	Aquaporin 4 expression in control and epileptic human cerebral cortex. 2011 , 1367, 330-9	48
164	Immunolocalization of aquaporin-4 in the brain, kidney, skeletal muscle, and gastro-intestinal tract of chicken. 2011 , 344, 51-61	12
163	The influence of benzamil hydrochloride on the evolution of hyponatremic brain edema as assessed by in vivo MRI study in rats. 2011 , 153, 2091-7; discussion 2097	1
162	Impact of aquaporin-4 channels on K ⁺ buffering and gap junction coupling in the hippocampus. 2011 , 59, 973-80	115
161	Evidence that compromised K ⁺ spatial buffering contributes to the epileptogenic effect of mutations in the human Kir4.1 gene (KCNJ10). 2011 , 59, 1635-42	110
160	Surface-associated astrocytes, not endfeet, form the glia limitans in posterior piriform cortex and have a spatially distributed, not a domain, organization. 2011 , 519, 1952-69	16
159	Structure and functions of aquaporin-4-based orthogonal arrays of particles. 2011 , 287, 1-41	89
158	Sulphoraphane enhances aquaporin-4 expression and decreases spinal cord oedema following spinal cord injury. 2011 , 25, 300-6	14
157	Computational models of neuron-astrocyte interaction in epilepsy. 2012 , 6, 58	59
156	Loss of perivascular Kir4.1 potassium channels in the sclerotic hippocampus of patients with mesial temporal lobe epilepsy. 2012 , 71, 814-25	71
155	Glial K ⁺ clearance and cell swelling: key roles for cotransporters and pumps. 2012 , 37, 2299-309	91
154	Water permeability of aquaporin-4 channel depends on bilayer composition, thickness, and elasticity. 2012 , 103, 1899-908	61
153	Aquaporins in drug discovery and pharmacotherapy. 2012 , 33, 691-703	64
152	Potassium channel KIR4.1 as an immune target in multiple sclerosis. 2012 , 367, 115-23	266

151	Changes in the astrocytic aquaporin-4 and inwardly rectifying potassium channel expression in the brain of the amyotrophic lateral sclerosis SOD1(G93A) rat model. 2012 , 60, 1991-2003		63
150	Intraperitoneal administration of Shiga toxin 2 induced neuronal alterations and reduced the expression levels of aquaporin 1 and aquaporin 4 in rat brain. 2012 , 53, 87-94		11
149	Potassium dependent regulation of astrocyte water permeability is mediated by cAMP signaling. 2012 , 7, e34936		34
148	The role of astroglia in the epileptic brain. 2012 , 3, 132		33
147	GABA Not Only a Neurotransmitter: Osmotic Regulation by GABA(A)R Signaling. <i>Frontiers in Cellular Neuroscience</i> , 2011 , 6, 3	6.1	16
146	Astrocyte dysfunction in temporal lobe epilepsy: K ⁺ channels and gap junction coupling. 2012 , 60, 1192-202		132
145	Aquaporin-4 and epilepsy. 2012 , 60, 1203-14		113
144	Decreased expression of the glial water channel aquaporin-4 in the intrahippocampal kainic acid model of epileptogenesis. 2012 , 235, 246-55		79
143	The role of aquaporin 4 in the brain. 2012 , 41, 32-44		37
142	Neuron-astrocyte signaling and epilepsy. 2013 , 244, 4-10		98
141	Evidence of aquaporin involvement in human central pontine myelinolysis. 2013 , 1, 40		29
140	The role of vasopressin V1A receptors in cytotoxic brain edema formation following brain injury. 2013 , 155, 151-64		35
139	Protective role of brain water channel AQP4 in murine cerebral malaria. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 1035-40	11.5	42
138	Glial cell changes in epilepsy: overview of the clinical problem and therapeutic opportunities. 2013 , 63, 638-51		23
137	The internalization and lysosomal degradation of brain AQP4 after ischemic injury. 2013 , 1539, 61-72		17
136	Aquaporin water channels in the nervous system. 2013 , 14, 265-77		458
135	Scaffolding Proteins in Transport Regulation. 2013 , 405-426		
134	Aquaporins: Role Under Salt Stress in Plants. 2013 , 213-248		7

133	Regulation of astrocyte glutamine synthetase in epilepsy. 2013 , 63, 670-81	77
132	Non-specific inhibitors of aquaporin-4 stimulate S100B secretion in acute hippocampal slices of rats. 2013 , 1491, 14-22	16
131	Transient OGG1, APE1, PARP1 and Polr expression in an Alzheimer's disease mouse model. 2013 , 134, 467-77	17
130	Mislocalization of AQP4 precedes chronic seizures in the kainate model of temporal lobe epilepsy. 2013 , 105, 30-41	67
129	'Hit & Run' model of closed-skull traumatic brain injury (TBI) reveals complex patterns of post-traumatic AQP4 dysregulation. 2013 , 33, 834-45	168
128	Physiological roles of aquaporin-4 in brain. 2013 , 93, 1543-62	381
127	Aquaporin-4-dependent K(+) and water transport modeled in brain extracellular space following neuroexcitation. 2013 , 141, 119-32	62
126	Regional registration of [6-(14)C]glucose metabolism during brain activation of β syn trophin knockout mice. 2013 , 125, 247-59	8
125	Filter gate closure inhibits ion but not water transport through potassium channels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 10842-7	11.5 43
124	The impact of alpha-syn trophin deletion on the changes in tissue structure and extracellular diffusion associated with cell swelling under physiological and pathological conditions. 2013 , 8, e68044	18
123	Altered astrocytic swelling in the cortex of β syn trophin-negative GFAP/EGFP mice. 2014 , 9, e113444	25
122	Membrane transporters in a human genome-scale metabolic knowledgebase and their implications for disease. 2014 , 5, 91	56
121	Physiological bases of the K+ and the glutamate/GABA hypotheses of epilepsy. 2014 , 108, 995-1012	44
120	Aquaporins: important but elusive drug targets. 2014 , 13, 259-77	360
119	Unraveling aquaporin interaction partners. 2014 , 1840, 1614-23	22
118	The extracellular matrix protein laminin α regulates the maturation and function of the blood-brain barrier. 2014 , 34, 15260-80	121
117	Aggregation state determines the localization and function of M1- and M23-aquaporin-4 in astrocytes. 2014 , 204, 559-73	68
116	Astrocytes and extracellular matrix in extrasynaptic volume transmission. 2014 , 369, 20130608	37

115	Interactions of HIV and drugs of abuse: the importance of glia, neural progenitors, and host genetic factors. 2014 , 118, 231-313		39
114	Neuropeptides as neuroprotective agents: Oxytocin a forefront developmental player in the mammalian brain. 2014 , 123, 37-78		35
113	Internalization of aquaporin-4 after collagenase-induced intracerebral hemorrhage. 2015 , 298, 554-61		8
112	Aquaporin-4 regulates the velocity and frequency of cortical spreading depression in mice. 2015 , 63, 1860-9		13
111	The central role of aquaporins in the pathophysiology of ischemic stroke. <i>Frontiers in Cellular Neuroscience</i> , 2015 , 9, 108	6.1	78
110	Dynamic regulation of aquaporin-4 water channels in neurological disorders. 2015 , 56, 401-21		19
109	Regulation and Function of AQP4 in the Central Nervous System. 2015 , 40, 2615-27		33
108	Mechanisms of astrocyte-mediated cerebral edema. 2015 , 40, 317-28		73
107	Role of astrocytes in epilepsy. 2015 , 5, a022434		127
106	Mesial temporal lobe epilepsy with psychiatric comorbidities: a place for differential neuroinflammatory interplay. 2015 , 12, 38		34
105	Deletion of aquaporin-4 increases extracellular K(+) concentration during synaptic stimulation in mouse hippocampus. 2015 , 220, 2469-74		35
104	Aquaporin-4 and Cerebrovascular Diseases. 2016 , 17,		32
103	Osmotherapy With Hypertonic Saline Attenuates Global Cerebral Edema Following Experimental Cardiac Arrest via Perivascular Pool of Aquaporin-4. 2016 , 44, e702-10		13
102	The Water Permeability and Pore Entrance Structure of Aquaporin-4 Depend on Lipid Bilayer Thickness. 2016 , 111, 90-9		14
101	Expression and clinical significance of aquaglyceroporins in human hepatocellular carcinoma. 2016 , 13, 5283-9		23
100	Perinodal glial swelling mitigates axonal degradation in a model of axonal injury. 2016 , 115, 1003-17		5
99	Water Channels. 2016 , 171-195		2
98	Therapeutic Targets and Future Directions. 2016 , 343-366		

97	Functional kinomics establishes a critical node of volume-sensitive cation-Cl cotransporter regulation in the mammalian brain. 2016 , 6, 35986	27
96	The multifaceted role of astrocytes in regulating myelination. 2016 , 283, 541-9	96
95	Conivaptan, a Selective Arginine Vasopressin V1a and V2 Receptor Antagonist Attenuates Global Cerebral Edema Following Experimental Cardiac Arrest via Perivascular Pool of Aquaporin-4. 2016 , 24, 273-82	19
94	Evidence for alterations of the glial syncytial function in major depressive disorder. 2016 , 72, 15-21	57
93	The Potential Roles of Aquaporin 4 in Alzheimer's Disease. 2016 , 53, 5300-9	28
92	Loss or Mislocalization of Aquaporin-4 Affects Diffusion Properties and Intermediary Metabolism in Gray Matter of Mice. 2017 , 42, 77-91	6
91	Deletion of Aquaporin-4 Curtails Extracellular Glutamate Elevation in Cortical Spreading Depression in Awake Mice. 2017 , 27, 24-33	14
90	Unaltered Glutamate Transporter-1 Protein Levels in Aquaporin-4 Knockout Mice. 2017 , 9, 17590914166878462	
89	Aquaporins in Nervous System. 2017 , 969, 81-103	29
88	Turning down the volume: Astrocyte volume change in the generation and termination of epileptic seizures. 2017 , 104, 24-32	25
87	Expression of aquaporin 4 in the chicken ovary in relation to follicle development. 2017 , 52, 857-864	7
86	The gene encoding the inwardly rectifying potassium channel Kir4.1 may be involved in sudden infant death syndrome. 2017 , 106, 1474-1480	6
85	Targeted deletion of Aqp4 promotes the formation of astrocytic gap junctions. 2017 , 222, 3959-3972	15
84	Astroglia as a cellular target for neuroprotection and treatment of neuro-psychiatric disorders. 2017 , 65, 1205-1226	69
83	Factors determining the density of AQP4 water channel molecules at the brain-blood interface. 2017 , 222, 1753-1766	27
82	MRI characteristics of the glia limitans externa: A 7T study. 2017 , 44, 140-145	10
81	Alterations in AQP4 expression and polarization in the course of motor neuron degeneration in SOD1G93A mice. 2017 , 16, 1739-1746	14
80	Individual hippocampal subfield assessment indicates that matrix macromolecules and gliosis are key elements for the increased T2 relaxation time seen in temporal lobe epilepsy. 2017 , 58, 149-159	24

79	Aquaporin-4 Functionality and Virchow-Robin Space Water Dynamics: Physiological Model for Neurovascular Coupling and Glymphatic Flow. 2017 , 18,		34
78	Hippocampal and Cortical Pyramidal Neurons Swell in Parallel with Astrocytes during Acute Hypoosmolar Stress. <i>Frontiers in Cellular Neuroscience</i> , 2017 , 11, 275	6.1	18
77	Water Homeostasis Dysfunction in Epilepsy. 2017 , 315-335		1
76	Alpha-syntrophin null mice are protected from non-alcoholic steatohepatitis in the methionine-choline-deficient diet model but not the atherogenic diet model. 2018 , 1863, 526-537		9
75	The role of aquaporin-4 in synaptic plasticity, memory and disease. 2018 , 136, 118-129		64
74	Low reliability of anti-KIR4.1 peptide auto-antibodies in multiple sclerosis patients. 2018 , 24, 910-918		4
73	Megalencephalic leukoencephalopathy with subcortical cysts: A personal biochemical retrospective. 2018 , 61, 50-60		17
72	Genetic defects disrupting glial ion and water homeostasis in the brain. 2018 , 28, 372-387		23
71	Hippocampal Atrophy Following Subarachnoid Hemorrhage Correlates with Disruption of Astrocyte Morphology and Capillary Coverage by AQP4. <i>Frontiers in Cellular Neuroscience</i> , 2018 , 12, 19	6.1	23
70	Expression of aquaporin 4 in the chicken oviduct following tamoxifen treatment. 2018 , 53, 1339-1346		3
69	Fluid Dynamics Inside the Brain Barrier: Current Concept of Interstitial Flow, Glymphatic Flow, and Cerebrospinal Fluid Circulation in the Brain. 2019 , 25, 155-166		59
68	Astrocytes and Glutamine Synthetase in Epileptogenesis. 2019 , 97, 1345-1362		22
67	Dystroglycan is involved in the activation of ERK pathway inducing the change of AQP4 expression in scratch-injured astrocytes. 2019 , 1721, 146347		5
66	Molecular Mechanism of T-2 Toxin-Induced Cerebral Edema by Aquaporin-4 Blocking and Permeation. 2019 , 59, 4942-4958		11
65	Computational Models of Pathophysiological Glial Activation in CNS Disorders. 2019 , 289-305		
64	Targeted deletion of β -syntrophin causes a loss of K 4.1 from Müller cell endfeet in mouse retina. 2019 , 67, 1138-1149		5
63	The potential roles of aquaporin 4 in amyotrophic lateral sclerosis. 2019 , 40, 1541-1549		9
62	Inhibitors of Mammalian Aquaporin Water Channels. 2019 , 20,		43

61	Astrocytic Ion Dynamics: Implications for Potassium Buffering and Liquid Flow. 2019 , 363-391	3
60	Neuron-glia interactions in the pathophysiology of epilepsy. 2019 , 20, 282-297	126
59	Glia and extracellular matrix molecules: What are their importance for the electrographic and MRI changes in the epileptogenic zone?. 2021 , 121, 106542	1
58	Role of Astrocytes in Post-traumatic Epilepsy. 2019 , 10, 1149	13
57	The Regional Specific Alterations in BBB Permeability are Relevant to the Differential Responses of 67-kDa LR Expression in Endothelial Cells and Astrocytes Following Status Epilepticus. 2019 , 20,	6
56	The role of aquaporin-4 and transient receptor potential vanilloid isoform 4 channels in the development of cytotoxic edema and associated extracellular diffusion parameter changes. 2019 , 50, 1685-1699	8
55	Astrocytes as Guardians of Neuronal Excitability: Mechanisms Underlying Epileptogenesis. 2020 , 11, 591690	22
54	Genetic Landscape of Common Epilepsies: Advancing towards Precision in Treatment. 2020 , 21,	11
53	Mechanisms of Blood-Brain Barrier Dysfunction in Traumatic Brain Injury. 2020 , 21,	32
52	A novel role of cardiac inwardly rectifying potassium channels explaining autonomic cardiovascular dysfunctions in a cuprizone-induced mouse model of multiple sclerosis. 2020 , 225, 102647	3
51	Glial Factors Regulating White Matter Development and Pathologies of the Cerebellum. 2020 , 45, 643-655	5
50	Astrocytes in the regulation of cerebrovascular functions. 2021 , 69, 817-841	18
49	Dp71 contribution to the molecular scaffold anchoring aquaporine-4 channels in brain macroglial cells. 2021 , 69, 954-970	5
48	Aquaporin-4 Reduces Post-Traumatic Seizure Susceptibility by Promoting Astrocytic Glial Scar Formation in Mice. 2021 , 38, 1193-1201	34
47	Glymphatic system, AQP4, and their implications in Alzheimer's disease. 2021 , 3, 5	13
46	Molecular mechanisms of brain water transport. 2021 , 22, 326-344	27
45	The Role of Neuroinflammation in Post-traumatic Epilepsy. 2021 , 12, 646152	3
44	Fluid Transport in the Brain. 2021 ,	33

43	Acetazolamide Alleviate Cerebral Edema Induced by Ischemic Stroke Through Inhibiting the Expression of AQP4 mRNA. 2021 , 1	3
42	Resveratrol prevents brain edema, blood-brain barrier permeability, and altered aquaporin profile in autism animal model. 2021 , 81, 579-604	2
41	Fluid metabolic pathways after subarachnoid hemorrhage. 2021 , 160, 13	2
40	The Human Hippocampus in Parkinson's Disease: An Integrative Stereological and Proteomic Study. 2021 , 11, 1345-1365	3
39	Orchestrating aquaporin-4 and connexin-43 expression in brain: Differential roles of β - and γ -syntrophin. 2021 , 1863, 183616	6
38	Astrocyte Role in Temporal Lobe Epilepsy and Development of Mossy Fiber Sprouting. <i>Frontiers in Cellular Neuroscience</i> , 2021 , 15, 725693	6.1 4
37	The Endothelial Frontier. 75-107	1
36	Increased seizure duration in mice lacking aquaporin-4 water channels. 2006 , 96, 389-92	27
35	Role of Astrocytes in Epilepsy. 2009 , 649-671	7
34	Emerging Role of Water Channels in Regulating Cellular Volume During Oxygen Deprivation and Cell Death. 2009 , 79-96	1
33	Novel roles of aquaporins revealed by phenotype analysis of knockout mice.	4
32	Functional implication of Dp71 in osmoregulation and vascular permeability of the retina. 2009 , 4, e7329	28
31	Dynamic volume changes in astrocytes are an intrinsic phenomenon mediated by bicarbonate ion flux. 2012 , 7, e51124	47
30	Targeting Water in the Brain: Role of Aquaporin-4 in Ischemic Brain Edema. 2019 , 20, 748-755	14
29	Aquaporins and Roles in Brain Health and Brain Injury. 2020 , 20, 498-512	6
28	NMDA Receptors in Glial Cells: Pending Questions. 2013 , 11, 250-62	60
27	The role of glial cells in epilepsy. 2014 , 134, 37-41	20
26	Responsive Astrocytic Endfeet: The Role of AQP4 in BBB Development and Functioning. 209-236	0

25	Aquaporins in the Brain. 2009 , 391-404		
24	Biomarkers of Astrocyte Microdomains. 2011 , 25-62		
23	Hypoosmolar dose-dependent swelling occurs in both pyramidal neurons and astrocytes in acute hippocampal slices.		
22	Autoimmune Astrocytopathy. 2019 , 329-355		
21	A role for aquaporin-4 during induction of form deprivation myopia in chick. 2008 , 14, 298-307		14
20	Changes in ocular aquaporin-4 (AQP4) expression following retinal injury. 2008 , 14, 1770-83		34
19	Differential expression of Kir4.1 and aquaporin 4 in the retina from endotoxin-induced uveitis rat. 2007 , 13, 309-17		26
18	Changes in ocular aquaporin expression following optic nerve crush. 2010 , 16, 330-40		20
17	Spatial and temporal dissociation of AQP4 and Kir4.1 expression during induction of refractive errors. 2010 , 16, 1610-9		11
16	Ion Channel Dysfunction in Astrocytes in Neurodegenerative Diseases.. 2022 , 13, 814285		0
15	Cerebral Microcirculation, Perivascular Unit, and Glymphatic System: Role of Aquaporin-4 as the Gatekeeper for Water Homeostasis.. 2021 , 12, 767470		2
14	Glia in Epilepsy: An Overview. 2022 , 323-351		
13	Canonical Bone Morphogenetic Protein Signaling Regulates Expression of Aquaporin-4 and Its Anchoring Complex in Mouse Astrocytes.. <i>Frontiers in Cellular Neuroscience</i> , 2022 , 16, 878154	6.1	0
12	Cells of the BloodBrain Barrier: An Overview of the Neurovascular Unit in Health and Disease. <i>Methods in Molecular Biology</i> , 2022 , 3-24	1.4	1
11	Loss of aquaporin-4 results in glymphatic system dysfunction via brain-wide interstitial fluid stagnation.		
10	Insight into the Mammalian Aquaporin Interactome. 2022 , 23, 9615		2
9	The Water Transport System in AstrocytesAquaporins. 2022 , 11, 2564		0
8	Role of the glymphatic system in idiopathic intracranial hypertension. 2022 , 222, 107446		0

7	Perspectives on the basis of seizure-induced respiratory dysfunction. 16,	1
6	The absence of AQP4/TRPV4 complex substantially reduces acute cytotoxic edema following ischemic injury. 16,	1
5	Aquaporins in Nervous System. 2023 , 99-124	0
4	Loss of aquaporin-4 results in glymphatic system dysfunction via brain-wide interstitial fluid stagnation. 12,	1
3	Astrocyte-neuron circuits in epilepsy. 2023 , 179, 106058	0
2	Multifaceted Roles of Aquaporins in the Pathogenesis of Alzheimer's Disease. 2023 , 24, 6528	0
1	Astrocytic TRPV4 Channels and Their Role in Brain Ischemia. 2023 , 24, 7101	0