Eric Beitz

List of Publications by Year
in descending order

75 papers	2,849 citations	201674 27 h-index	182427 51 g-index
75 all docs	75 docs citations	75 times ranked	2562 citing authors

#	Article	IF	Citations
1	Mutational widening of constrictions in a formateâ€“nitrite/H+ transporter enables aquaporin-like water permeability and proton conductance. Journal of Biological Chemistry, 2022, 298, 101513.	3.4	6
2	Lactic Acid Permeability of Aquaporin-9 Enables Cytoplasmic Lactate Accumulation via an Ion Trap. Life, 2022, 12, 120.	2.4	5
3	Pentafluoroâ€3â€hydroxyâ€pentâ€2â€enâ€1â€ones Potently Inhibit FNTâ€Type Lactate Transporters from all Five Humanâ€Pathogenic <i>Plasmodium</i> Species. ChemMedChem, 2021, 16, 1283-1289.	3.2	12
4	Aquaporins. , 2021, , 1-7.		0
5	Basigin drives intracellular accumulation of l-lactate by harvesting protons and substrate anions. PLoS ONE, 2021, 16, e0249110.	2.5	13
6	Degraded Arabinogalactans and Their Binding Properties to Cancer-Associated Human Galectins. International Journal of Molecular Sciences, 2021, 22, 4058.	4.1	6
7	Structure memes: Intuitive visualization of sequence logo and subfamily logo information in a <scp>3D</scp> proteinâ€structural context. Proteins: Structure, Function and Bioinformatics, 2021, 89, 1262-1269.	2.6	0
8	Cysteine 159 delineates a hinge region of the alternating access monocarboxylate transporterÂ1 and is targeted by cysteineâ€modifying inhibitors. FEBS Journal, 2021, 288, 6052-6062.	4.7	7
9	Fluorescence Cross-Correlation Spectroscopy Yields True Affinity and Binding Kinetics of Plasmodium Lactate Transport Inhibitors. Pharmaceuticals, 2021, 14, 757.	3.8	11
10	Aquaporins with lactate/lactic acid permeability at physiological pH conditions. Biochimie, 2021, 188, 7-11.	2.6	10
11	Cover Image, Volume 89, Issue 10. Proteins: Structure, Function and Bioinformatics, 2021, 89, C1.	2.6	0
12	Discovery and Development of Inhibitors of the Plasmodial FNT-Type Lactate Transporter as Novel Antimalarials. Pharmaceuticals, 2021, 14, 1191.	3.8	5
13	Aquaporins. , 2021, , 242-248.		0
14	Transmembrane Facilitation of Lactate/H+ Instead of Lactic Acid Is Not a Question of Semantics but of Cell Viability. Membranes, 2020, 10, 236.	3.0	14
15	Introduction of Scaffold Nitrogen Atoms Renders Inhibitors of the Malarial l-Lactate Transporter, PfFNT, Effective against the Gly107Ser Resistance Mutation. Journal of Medicinal Chemistry, 2020, 63, 9731-9741.	6.4	12
16	The Ionophores CCCP and Gramicidin but Not Nigericin Inhibit Trypanosoma brucei Aquaglyceroporins at Neutral pH. Cells, 2020, 9, 2335.	4.1	2
17	A Fluorescence-Based Method to Measure ADP/ATP Exchange of Recombinant Adenine Nucleotide Translocase in Liposomes. Biomolecules, 2020, 10, 685.	4.0	12
18	Cell-Free and Yeast-Based Production of the Malarial Lactate Transporter, PfFNT, Delivers Comparable Yield and Protein Quality. Frontiers in Pharmacology, 2019, 10, 375.	3.5	1

#	Article	IF	Citations
19	Formateâ€"nitrite transporters carrying nonprotonatable amide amino acids instead of a central histidine maintain pH-dependent transport. Journal of Biological Chemistry, 2019, 294, 623-631.	3.4	26
20	The intracellular parasite Toxoplasma gondii harbors three druggable FNT-type formate and l-lactate transporters in the plasma membrane. Journal of Biological Chemistry, 2018, 293, 17622-17630.	3.4	29
21	Trypanosoma brucei aquaglyceroporins mediate the transport of metabolic end-products: Methylglyoxal, D-lactate, L-lactate and acetate. Biochimica Et Biophysica Acta - Biomembranes, 2018, 1860, 2252-2261.	2.6	8
22	Targeting Channels and Transporters in Protozoan Parasite Infections. Frontiers in Chemistry, 2018, 6, 88.	3.6	29
23	Mechanism of formateâ€"nitrite transporters by dielectric shift of substrate acidity. EMBO Journal, 2017, 36, 949-958.	7.8	61
24	A widened substrate selectivity filter of eukaryotic formateâ€nitrite transporters enables highâ€level lactate conductance. FEBS Journal, 2017, 284, 2663-2673.	4.7	21
25	Electrostatic attraction of weak monoacid anions increases probability for protonation and passage through aquaporins. Journal of Biological Chemistry, 2017, 292, 9358-9364.	3.4	29
26	Formate-nitrite transporters: Monoacids ride the dielectric slide. Channels, 2017, 11, 365-367.	2.8	19
27	Reducing isoform complexity of human tetraspanins by optimized expression in Dictyostelium discoideum enables high-throughput functional read-out. Protein Expression and Purification, 2017, 135, 8-15.	1.3	0
28	Substrate-analogous inhibitors exert antimalarial action by targeting the Plasmodium lactate transporter PfFNT at nanomolar scale. PLoS Pathogens, 2017, 13, e1006172.	4.7	45
29	The C Isoform of Dictyostelium Tetraspanins Localizes to the Contractile Vacuole and Contributes to Resistance against Osmotic Stress. PLoS ONE, 2016, 11, e0162065.	2.5	3
30	Attacking Aquaporin Water and Solute Channels of Human-Pathogenic Parasites: New Routes for Treatment?. , 2016, , 233-246.		1
31	High-level cell-free production of the malarial lactate transporter PfFNT as a basis for crystallization trials and directional transport studies. Protein Expression and Purification, 2016, 126, 109-114.	1.3	12
32	Pentamidine Is Not a Permeant but a Nanomolar Inhibitor of the Trypanosoma brucei Aquaglyceroporin-2. PLoS Pathogens, 2016, 12, e1005436.	4.7	46
33	Number and Regulation of Protozoan Aquaporins Reflect Environmental Complexity. Biological Bulletin, 2015, 229, 38-46.	1.8	18
34	Bi-functionality of Opisthorchis viverrini aquaporins. Biochimie, 2015, 108, 149-159.	2.6	7
35	Identity of a Plasmodium lactate/H+ symporter structurally unrelated to human transporters. Nature Communications, 2015, 6, 6284.	12.8	62
36	The amoeboidal <i>Dictyostelium</i> aquaporin AqpB is gated via Tyr216 and <i>aqpB</i> gene deletion affects random cell motility. Biology of the Cell, 2015, 107, 78-88.	2.0	6

#	Article	IF	Citations
37	Challenges and achievements in the therapeutic modulation of aquaporin functionality. , 2015, 155, 22-35.		46
38	The arginine-facing amino acid residue of the rat aquaporin 1 constriction determines solute selectivity according to its size and lipophilicity. Molecular Membrane Biology, 2014, 31, 228-238.	2.0	10
39	Aquaporins with anion/monocarboxylate permeability: mechanisms, relevance for pathogenÃ¢â‚¬â€œhost interactions. Frontiers in Pharmacology, 2014, 5, 199.	3.5	33
40	Parasite aquaporins: Current developments in drug facilitation and resistance. Biochimica Et Biophysica Acta - General Subjects, 2014, 1840, 1566-1573.	2.4	36
41	Structural determinants of the hydrogen peroxide permeability of aquaporins. FEBS Journal, 2014, 281, 647-656.	4.7	151
42	Discovery of Novel Human Aquaporin-1 Blockers. ACS Chemical Biology, 2013, 8, 249-256.	3.4	58
43	Preparative scale production and functional reconstitution of a human aquaglyceroporin (AQP3) using a cell free expression system. New Biotechnology, 2013, 30, 545-551.	4.4	22
44	Specific aquaporins increase the ammonia tolerance of aSaccharomyces cerevisiae mep1-3fps1deletion strain. Molecular Membrane Biology, 2013, 30, 43-51.	2.0	4
45	Functional Characterization of a Novel Aquaporin from Dictyostelium discoideum Amoebae Implies a Unique Gating Mechanism. Journal of Biological Chemistry, 2012, 287, 7487-7494.	3.4	27
46	Molar concentrations of sorbitol and polyethylene glycol inhibit the Plasmodium aquaglyceroporin but not that of E. coli: Involvement of the channel vestibules. Biochimica Et Biophysica Acta - Biomembranes, 2012, 1818, 1218-1224.	2.6	25
47	Fluorescent In Situ Folding Control for Rapid Optimization of Cell-Free Membrane Protein Synthesis. PLoS ONE, 2012, 7, e42186.	2.5	21
48	Enhancement of Proton Conductance by Mutations of the Selectivity Filter of Aquaporin-1. Journal of Molecular Biology, 2011, 407, 607-620.	4.2	61
49	The aquaporin gene family of the ectomycorrhizal fungus <i>Laccaria bicolor</i>: lessons for symbiotic functions. New Phytologist, 2011, 190, 927-940.	7.3	88
50	Requirement for asparagine in the aquaporin NPA sequence signature motifs for cation exclusion. FEBS Journal, 2011, 278, 740-748.	4.7	45
51	The role of alanine 163 in solute permeability of Leishmania major aquaglyceroporin LmAQP1. Molecular and Biochemical Parasitology, 2011, 175, 83-90.	1.1	26
52	Functional analysis of novel aquaporins from Fasciola gigantica. Molecular and Biochemical Parasitology, 2011, 175, 144-153.	1.1	14
53	Functional and evolutional implications of natural channel-enzyme fusion proteins. Biomolecular Concepts, 2011, 2, 439-444.	2.2	2
54	Novel Channel Enzyme Fusion Proteins Confer Arsenate Resistance. Journal of Biological Chemistry, 2010, 285, 40081-40087.	3.4	45

#	Article	IF	Citations
55	Metalloid Transport by Aquaglyceroporins: Consequences in the Treatment of Human Diseases. Advances in Experimental Medicine and Biology, 2010, 679, 57-69.	1.6	15
56	Concerted action of two cation filters in the aquaporin water channel. EMBO Journal, 2009, 28, 2188-2194.	7.8	84
57	In Vitro Analysis and Modification of Aquaporin Pore Selectivity. Handbook of Experimental Pharmacology, 2009, , 77-92.	1.8	17
58	A yeast-based phenotypic screen for aquaporin inhibitors. Pflugers Archiv European Journal of Physiology, 2008, 456, 717-720.	2.8	16
59	Jammed traffic impedes parasite growth. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 13855-13856.	7.1	11
60	Microwave-Assisted Ring Opening of Epoxides:â€‰ A General Route to the Synthesis of 1-Aminopropan-2-ols with Anti Malaria Parasite Activities. Journal of Medicinal Chemistry, 2007, 50, 4243-4249.	6.4	57
61	Determinants of AQP6 trafficking to intracellular sites versus the plasma membrane in transfected mammalian cells. Biology of the Cell, 2006, 98, 101-109.	2.0	53
62	Dihydroxyacetone and methylglyoxal as permeants of the Plasmodium aquaglyceroporin inhibit parasite proliferation. Biochimica Et Biophysica Acta - Biomembranes, 2006, 1758, 1012-1017.	2.6	51
63	Ammonia permeability of the aquaglyceroporins from Plasmodium falciparum, Toxoplasma gondii and Trypansoma brucei. Molecular Microbiology, 2006, 61, 1598-1608.	2.5	80
64	Subfamily logos: visualization of sequence deviations at alignment positions with high information content. BMC Bioinformatics, 2006, 7, 313.	2.6	14
65	Aquaporin Water and Solute Channels from Malaria Parasites and Other Pathogenic Protozoa. ChemMedChem, 2006, 1, 587-592.	3.2	22
66	Point mutations in the aromatic/arginine region in aquaporin 1 allow passage of urea, glycerol, ammonia, and protons. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 269-274.	7.1	300
67	Aquaporins from pathogenic protozoan parasites: structure, function and potential for chemotherapy. Biology of the Cell, 2005, 97, 373-383.	2.0	81
68	Cloning, Heterologous Expression, and Characterization of Three Aquaglyceroporins from Trypanosoma brucei. Journal of Biological Chemistry, 2004, 279, 42669-42676.	3.4	72
69	Molecular dissection of water and glycerol permeability of the aquaglyceroporin from Plasmodium falciparum by mutational analysis. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 1153-1158.	7.1	103
70	Aquaporin-mediated fluid regulation in the inner ear. Cellular and Molecular Neurobiology, 2003, 23, 315-329.	3.3	56
71	A single aquaporin gene encodes a water/glycerol/urea facilitator inToxoplasma gondiiwith similarity to plant tonoplast intrinsic proteins1. FEBS Letters, 2003, 555, 500-504.	2.8	39
72	Characterization of Aquaporin-6 as a Nitrate Channel in Mammalian Cells. Journal of Biological Chemistry, 2002, 277, 39873-39879.	3.4	188

#	Article	IF	Citations
73	A Single, Bi-functional Aquaglyceroporin in Blood-stagePlasmodium falciparum Malaria Parasites. Journal of Biological Chemistry, 2002, 277, 4874-4882.	3.4	145
74	Expression pattern of aquaporin water channels in the inner ear of the rat. Hearing Research, 1999, 132, 76-84.	2.0	82
75	The effect of anti-diuretic hormone on the endolymphatic sac of the inner ear. Pflugers Archiv European Journal of Physiology, 1998, 436, 970-975.	2.8	111