Renae M Ryan

List of Publications by Year
in descending order

61 papers	2,615 citations	201674 27 h-index	197818 49 g-index
69 all docs	69 docs citations	69 times ranked	2449 citing authors

#	Article	IF	Citations
1	Coupling substrate and ion binding to extracellular gate of a sodium-dependent aspartate transporter. Nature, 2007, 445, 387-393.	27.8	473
2	Mechanisms of Glutamate Transport. Physiological Reviews, 2013, 93, 1621-1657.	28.8	274
3	Targeting glutamine transport to suppress melanoma cell growth. International Journal of Cancer, 2014, 135, 1060-1071.	5.1	179
4	Loss-of-function mutations in the glutamate transporter SLC1A1 cause human dicarboxylic aminoaciduria. Journal of Clinical Investigation, 2011, 121, 446-453.	8.2	117
5	The uncoupled chloride conductance of a bacterial glutamate transporter homolog. Nature Structural and Molecular Biology, 2007, 14, 365-371.	8.2	114
6	The Chloride Permeation Pathway of a Glutamate Transporter and Its Proximity to the Glutamate Translocation Pathway. Journal of Biological Chemistry, 2004, 279, 20742-20751.	3.4	109
7	Functional Characterization of a Na+-dependent Aspartate Transporter from Pyrococcus horikoshii. Journal of Biological Chemistry, 2009, 284, 17540-17548.	3.4	102
8	Glycine transport inhibitors for the treatment of pain. Trends in Pharmacological Sciences, 2014, 35, 423-430.	8.7	69
9	Distinct Conformational States Mediate the Transport and Anion Channel Properties of the Glutamate Transporter EAAT-1. Journal of Biological Chemistry, 2002, 277, 13494-13500.	3.4	67
10	Structural characterisation reveals insights into substrate recognition by the glutamine transporter ASCT2/SLC1A5. Nature Communications, 2018, 9, 38.	12.8	65
11	Position of the Third Na+ Site in the Aspartate Transporter GltPh and the Human Glutamate Transporter, EAAT1. PLoS ONE, 2012, 7, e33058.	2.5	65
12	Benzylserine inhibits breast cancer cell growth by disrupting intracellular amino acid homeostasis and triggering amino acid response pathways. BMC Cancer, 2018, 18, 689.	2.6	43
13	Structural Optimization and Pharmacological Evaluation of Inhibitors Targeting Dual-Specificity Tyrosine Phosphorylation-Regulated Kinases (DYRK) and CDC-like kinases (CLK) in Glioblastoma. Journal of Medicinal Chemistry, 2017, 60, 2052-2070.	6.4	41
14	Amino Acid Transporters and Exchangers from the SLC1A Family: Structure, Mechanism and Roles in Physiology and Cancer. Neurochemical Research, 2020, 45, 1268-1286.	3.3	40
15	Glutamate transporters have a chloride channel with two hydrophobic gates. Nature, 2021, 591, 327-331.	27.8	40
16	Effects of sumatriptan on rat medullary dorsal horn neurons. Pain, 2004, 111, 30-37.	4.2	39
17	The Domain Interface of the Human Glutamate Transporter EAAT1 Mediates Chloride Permeation. Biophysical Journal, 2014, 107, 621-629.	0.5	37
18	The position of an arginine residue influences substrate affinity and K⁺ coupling in the human glutamate transporter, EAAT1. Journal of Neurochemistry, 2010, 114, 565-575.	3.9	36

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19	Molecular Determinants for Functional Differences between Alanine-Serine-Cysteine Transporter 1 and Other Glutamate Transporter Family Members. Journal of Biological Chemistry, 2013, 288, 8250-8257.	3.4	36
20	Prostaglandin E2inhibits calcium current in two subâ€populations of acutely isolated mouse trigeminal sensory neurons. Journal of Physiology, 2002, 539, 433-444.	2.9	35
21	Monoterpene Glycoside ESK246 from <i>Pittosporum</i> Targets LAT3 Amino Acid Transport and Prostate Cancer Cell Growth. ACS Chemical Biology, 2014, 9, 1369-1376.	3.4	35
22	Slips, leaks and channels in glutamate transporters. Channels, 2008, 2, 51-58.	2.8	32
23	Transport Rates of a Glutamate Transporter Homologue Are Influenced by the Lipid Bilayer. Journal of Biological Chemistry, 2015, 290, 9780-9788.	3.4	32
24	Allosteric modulation of neurotransmitter transporters at excitatory synapses. European Journal of Pharmaceutical Sciences, 2004, 23, 1-11.	4.0	31
25	Oleoylâ€<scp>l</scp>â€carnitine inhibits glycine transport by <scp>G</scp>ly<scp>T</scp>2. British Journal of Pharmacology, 2013, 168, 891-902.	5.4	30
26	Elevating the alternating-access model. Nature Structural and Molecular Biology, 2016, 23, 187-189.	8.2	30
27	Molecular Determinants for Substrate Interactions with the Glycine Transporter GlyT2. ACS Chemical Neuroscience, 2018, 9, 603-614.	3.5	30
28	Synthesis and Characterization of Novel Acyl-Glycine Inhibitors of GlyT2. ACS Chemical Neuroscience, 2017, 8, 1949-1959.	3.5	29
29	Development of an <i>N</i>-Acyl Amino Acid That Selectively Inhibits the Glycine Transporter 2 To Produce Analgesia in a Rat Model of Chronic Pain. Journal of Medicinal Chemistry, 2019, 62, 2466-2484.	6.4	28
30	Identification of a 3rd Na+ Binding Site of the Glycine Transporter, GlyT2. PLoS ONE, 2016, 11, e0157583.	2.5	28
31	Extracellular Loops 2 and 4 of GLYT2 Are Required for N-Arachidonylglycine Inhibition of Glycine Transport. Journal of Biological Chemistry, 2009, 284, 36424-36430.	3.4	27
32	Identification of an allosteric binding site on the human glycine transporter, GlyT2, for bioactive lipid analgesics. ELife, 2019, 8, .	6.0	26
33	Regulation of Glutamate, GABA and Dopamine Transporter Uptake, Surface Mobility and Expression. Frontiers in Cellular Neuroscience, 2021, 15, 670346.	3.7	25
34	A channel in a transporter. Clinical and Experimental Pharmacology and Physiology, 2005, 32, 1-6.	1.9	23
35	Water and urea permeation pathways of the human excitatory amino acid transporter EAAT1. Biochemical Journal, 2011, 439, 333-340.	3.7	21
36	Na+ Interactions with the Neutral Amino Acid Transporter ASCT1. Journal of Biological Chemistry, 2014, 289, 17468-17479.	3.4	21

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37	Glycine transporter2 inhibitors: Getting the balance right. Neurochemistry International, 2016, 98, 89-93.	3.8	20
38	The Split Personality of Glutamate Transporters: A Chloride Channel and a Transporter. Neurochemical Research, 2016, 41, 593-599.	3.3	19
39	The Role of Cation Binding in Determining Substrate Selectivity of Glutamate Transporters. Journal of Biological Chemistry, 2009, 284, 4510-4515.	3.4	18
40	The amino acid transporter, <scp>SLC</scp>1A3, is plasma membraneâ€localised in adipocytes and its activity is insensitive to insulin. FEBS Letters, 2017, 591, 322-330.	2.8	16
41	Lipid inhibitors of high affinity glycine transporters: Identification of a novel class of analgesics. Neurochemistry International, 2014, 73, 211-216.	3.8	15
42	Tuning the ion selectivity of glutamate transporterâ€"associated uncoupled conductances. Journal of General Physiology, 2016, 148, 13-24.	1.9	15
43	Characterization of the Inward- and Outward-Facing Substrate Binding Sites of the Prokaryotic Aspartate Transporter, Glt_{Ph}. Biochemistry, 2016, 55, 6801-6810.	2.5	14
44	Design, Synthesis, and Biological Evaluation of Tetraâ€Substituted Thiophenes as Inhibitors of p38Î± MAPK. ChemistryOpen, 2015, 4, 56-64.	1.9	12
45	Ataxia-linked SLC1A3 mutations alter EAAT1 chloride channel activity and glial regulation of CNS function. Journal of Clinical Investigation, 2022, 132, .	8.2	10
46	How and Why Are Channels in Transporters?. Science Signaling, 2005, 2005, pe17-pe17.	3.6	6
47	Flexible Analogues of Azaindole DYRK1A Inhibitors Elicit Cytotoxicity in Glioblastoma Cells. Australian Journal of Chemistry, 2018, 71, 789.	0.9	6
48	Microscopic Characterization of the Chloride Permeation Pathway in the Human Excitatory Amino Acid Transporter 1 (EAAT1). ACS Chemical Neuroscience, 2022, 13, 776-785.	3.5	6
49	Synthesis and in vitro evaluation of diverse heterocyclic diphenolic compounds as inhibitors of DYRK1A. Bioorganic and Medicinal Chemistry, 2018, 26, 5852-5869.	3.0	5
50	Characterizing unexpected interactions of a glutamine transporter inhibitor with members of the SLC1A transporter family. Journal of Biological Chemistry, 2022, 298, 102178.	3.4	5
51	Site-Directed Mutagenesis in the Study of Membrane Transporters. Methods in Molecular Biology, 2010, 637, 277-293.	0.9	4
52	Acetyl-CoA-Mediated Post-Biosynthetic Modification of Desferrioxamine B Generates <i>N</i>- and N-<i>O</i>-Acetylated Isomers Controlled by a pH Switch. ACS Chemical Biology, 2022, 17, 426-437.	3.4	4
53	Site-Directed Mutagenesis in the Study of Membrane Transporters. , 2003, 227, 97-108.		1
54	Regulation of SLC1A4 and SLC1A5 in Prostate Cancerâ€"Letter. Molecular Cancer Research, 2018, 16, 1809-1810.	3.4	1

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55	Allosteric Modulation of Glutamate Transporters. , 2004, , 161-174.		1
56	Brain transporters: From genes and genetic disorders to function and drug discovery. Neurochemistry International, 2016, 98, 1-3.	3.8	0
57	The Split Personality of Glutamate Transporters: a Channel and a Transporter. Biophysical Journal, 2018, 114, 332a.	0.5	0
58	A Novel Chloride Conducting Conformation in Human Glutamate Transporters. Biophysical Journal, 2021, 120, 171a.	0.5	0
59	Glutamate Transporters (EAATS) Contain a Conserved Chloride Channel with Two Hydrophobic Gates. Biophysical Journal, 2021, 120, 104a-105a.	0.5	0
60	Molecular Basis for Substrate and Inhibitor Interactions with the Glycine Transporter, GlyT2. FASEB Journal, 2015, 29, 566.6.	0.5	0
61	The twisting elevator mechanism of glutamate transporters reveals the structural basis for the dual transport-channel functions. Current Opinion in Structural Biology, 2022, 75, 102405.	5.7	0