Samantha J Perez-Miller

List of Publications by Year
in descending order

30 papers	1,210 citations	430874 18 h-index	477307 29 g-index
35 all docs	35 docs citations	35 times ranked	1708 citing authors

#	Article	IF	Citations
1	Alda-1 is an agonist and chemical chaperone for the common human aldehyde dehydrogenase 2 variant. Nature Structural and Molecular Biology, 2010, 17, 159-164.	8.2	193
2	Coenzyme Isomerization Is Integral to Catalysis in Aldehyde Dehydrogenaseâ€‚â€¡. Biochemistry, 2003, 42, 7100-7109.	2.5	152
3	SARS-CoV-2 spike protein co-opts VEGF-A/neuropilin-1 receptor signaling to induce analgesia. Pain, 2021, 162, 243-252.	4.2	119
4	Structural Insights Into TDP-43 and Effects of Post-translational Modifications. Frontiers in Molecular Neuroscience, 2019, 12, 301.	2.9	86
5	Three-dimensional structures of the three human class I alcohol dehydrogenases. Protein Science, 2001, 10, 697-706.	7.6	65
6	Discovery of a Novel Class of Covalent Inhibitor for Aldehyde Dehydrogenases. Journal of Biological Chemistry, 2011, 286, 43486-43494.	3.4	65
7	(S)-Lacosamide Binding to Collapsin Response Mediator Protein 2 (CRMP2) Regulates CaV2.2 Activity by Subverting Its Phosphorylation by Cdk5. Molecular Neurobiology, 2016, 53, 1959-1976.	4.0	50
8	Inhibition of the Ubc9 E2 SUMO-conjugating enzymeâ€“CRMP2 interaction decreases NaV1.7 currents and reverses experimental neuropathic pain. Pain, 2018, 159, 2115-2127.	4.2	49
9	Small Molecule Targeting TDP-43â€™s RNA Recognition Motifs Reduces Locomotor Defects in a Drosophila Model of Amyotrophic Lateral Sclerosis (ALS). ACS Chemical Biology, 2019, 14, 2006-2013.	3.4	45
10	Homologyâ€guided mutational analysis reveals the functional requirements for antinociceptive specificity of collapsin response mediator protein 2â€derived peptides. British Journal of Pharmacology, 2018, 175, 2244-2260.	5.4	40
11	A single structurally conserved SUMOylation site in CRMP2 controls NaV1.7 function. Channels, 2017, 11, 316-328.	2.8	34
12	Light Chain C-Terminal Region Reinforces the Stability of Clathrin Heavy Chain Trimers. Traffic, 2007, 8, 1101-1110.	2.7	31
13	Targeting the CaVÎ±â€“CaVÎ² interaction yields an antagonist of the N-type CaV2.2 channel with broad antinociceptive efficacy. Pain, 2019, 160, 1644-1661.	4.2	30
14	Novel Compounds Targeting Neuropilin Receptor 1 with Potential To Interfere with SARS-CoV-2 Virus Entry. ACS Chemical Neuroscience, 2021, 12, 1299-1312.	3.5	30
15	Order and disorder in mitochondrial aldehyde dehydrogenase. Chemico-Biological Interactions, 2001, 130-132, 3-14.	4.0	23
16	High resolution Xâ€ray structures of mouse major urinary protein nasal isoform in complex with pheromones. Protein Science, 2010, 19, 1469-1479.	7.6	23
17	Selective targeting of NaV1.7 via inhibition of the CRMP2-Ubc9 interaction reduces pain in rodents. Science Translational Medicine, 2021, 13, eabh1314.	12.4	23
18	The Natural Flavonoid Naringenin Elicits Analgesia through Inhibition of NaV1.8 Voltage-Gated Sodium Channels. ACS Chemical Neuroscience, 2019, 10, 4834-4846.	3.5	20

#	Article	IF	Citations
19	The role of cyclin-dependent kinase 5 in neuropathic pain. Pain, 2020, 161, 2674-2689.	4.2	20
20	Chemical shift perturbation mapping of the Ubc9-CRMP2 interface identifies a pocket in CRMP2 amenable for allosteric modulation of Nav1.7 channels. Channels, 2018, 12, 219-227.	2.8	17
21	Druggability of CRMP2 for Neurodegenerative Diseases. ACS Chemical Neuroscience, 2020, 11, 2492-2505.	3.5	13
22	Expression and purification of functional human glycogen synthase-1 (hGYS1) in insect cells. Protein Expression and Purification, 2013, 90, 78-83.	1.3	12
23	A modulator of the low-voltage-activated T-type calcium channel that reverses HIV glycoprotein 120-, paclitaxel-, and spinal nerve ligation-induced peripheral neuropathies. Pain, 2020, 161, 2551-2570.	4.2	12
24	Antihypertensive drug treatment and susceptibility to SARS-CoV-2 infection in human PSC-derived cardiomyocytes and primary endothelial cells. Stem Cell Reports, 2021, 16, 2459-2472.	4.8	11
25	A Chemical Biology Approach to Model Pontocerebellar Hypoplasia Type 1B (PCH1B). ACS Chemical Biology, 2018, 13, 3000-3010.	3.4	9
26	Catalytic contribution of threonine 244 in human ALDH2. Chemico-Biological Interactions, 2013, 202, 32-40.	4.0	4
27	Comparison of quinazoline and benzoylpyrazoline chemotypes targeting the CaVÎ±-Î² interaction as antagonists of the N-type CaV2.2 channel. Channels, 2021, 15, 128-135.	2.8	4
28	Stereospecific Effects of Benzimidazolonepiperidine Compounds on T-Type Ca²⁺ Channels and Pain. ACS Chemical Neuroscience, 2022, 13, 2035-2047.	3.5	4
29	Remodeling the interactions between TDP43 and RNA for development of therapeutics for ALS. FASEB Journal, 2019, 33, 670.1.	0.5	0
30	The small molecule compound C65780 alleviates pain by stabilizing voltage-gated sodium channels in the inactivated and slowly-recovering state. Neuropharmacology, 2022, , 109057.	4.1	0