Gregory T Macleod

List of Publications by Year
in descending order

28 papers	995 citations	471061 17 h-index	500791 28 g-index
32 all docs	32 docs citations	32 times ranked	1515 citing authors

#	ARTICLE	IF	CITATIONS
1	Expression of Multiple Transgenes from a Single Construct Using Viral 2A Peptides in Drosophila. PLoS ONE, 2014, 9, e100637.	1.1	126
2	Endogenous tagging reveals differential regulation of Ca²⁺ channels at single AZs during presynaptic homeostatic potentiation and depression. Journal of Neuroscience, 2019, 39, 3068-18.	1.7	81
3	Neuronâ€specific expression of CuZnSOD prevents the loss of muscle mass and function that occurs in homozygous CuZnSODâ€knockout mice. FASEB Journal, 2014, 28, 1666-1681.	0.2	75
4	AP180 Maintains the Distribution of Synaptic and Vesicle Proteins in the Nerve Terminal and Indirectly Regulates the Efficacy of Ca2+-Triggered Exocytosis. Journal of Neurophysiology, 2005, 94, 1888-1903.	0.9	72
5	Presynaptic Mitochondria in Functionally Different Motor Neurons Exhibit Similar Affinities for Ca²⁺But Exert Little Influence as Ca²⁺Buffers at Nerve Firing Rates<i>In Situ</i>. Journal of Neuroscience, 2010, 30, 1869-1881.	1.7	71
6	A TRPV Channel in Drosophila Motor Neurons Regulates Presynaptic Resting Ca2+ Levels, Synapse Growth, and Synaptic Transmission. Neuron, 2014, 84, 764-777.	3.8	68
7	Cytosolic Calcium Coordinates Mitochondrial Energy Metabolism with Presynaptic Activity. Journal of Neuroscience, 2012, 32, 1233-1243.	1.7	63
8	Mitochondrial Free Ca2+ Levels and Their Effects on Energy Metabolism in Drosophila Motor Nerve Terminals. Biophysical Journal, 2013, 104, 2353-2361.	0.2	60
9	The Lack of CuZnSOD Leads to Impaired Neurotransmitter Release, Neuromuscular Junction Destabilization and Reduced Muscle Strength in Mice. PLoS ONE, 2014, 9, e100834.	1.1	43
10	Modification of a Hydrophobic Layer by a Point Mutation in Syntaxin 1A Regulates the Rate of Synaptic Vesicle Fusion. PLoS Biology, 2007, 5, e72.	2.6	42
11	High-Probability Neurotransmitter Release Sites Represent an Energy-Efficient Design. Current Biology, 2016, 26, 2562-2571.	1.8	40
12	Genetically encoded pHâ€indicators reveal activityâ€dependent cytosolic acidification of <i>Drosophila</i> motor nerve termini <i>in vivo</i>. Journal of Physiology, 2013, 591, 1691-1706.	1.3	36
13	Differential Control of Presynaptic CaMKII Activation and Translocation to Active Zones. Journal of Neuroscience, 2011, 31, 9093-9100.	1.7	32
14	The Krebs Cycle Enzyme Isocitrate Dehydrogenase 3A Couples Mitochondrial Metabolism to Synaptic Transmission. Cell Reports, 2017, 21, 3794-3806.	2.9	31
15	The Redistribution of<i>Drosophila</i>Vesicular Monoamine Transporter Mutants from Synaptic Vesicles to Large Dense-Core Vesicles Impairs Amine-Dependent Behaviors. Journal of Neuroscience, 2014, 34, 6924-6937.	1.7	24
16	Neuronal Glutamatergic Synaptic Clefts Alkalinize Rather Than Acidify during Neurotransmission. Journal of Neuroscience, 2020, 40, 1611-1624.	1.7	21
17	Na⁺/H⁺ exchange via the <i>Drosophila</i> vesicular glutamate transporter mediates activityâ€induced acid efflux from presynaptic terminals. Journal of Physiology, 2017, 595, 805-824.	1.3	19
18	Presynaptic Mitochondrial Volume and Packing Density Scale with Presynaptic Power Demand. Journal of Neuroscience, 2022, 42, 954-967.	1.7	18

#	Article	IF	Citations
19	Forward-Filling of Dextran-Conjugated Indicators for Calcium Imaging at the <i>Drosophila</i> Larval Neuromuscular Junction. Cold Spring Harbor Protocols, 2012, 2012, pdb.prot070094.	0.2	15
20	Synaptic Homeostasis on the Fast Track. Neuron, 2006, 52, 569-571.	3.8	11
21	Loading Drosophila Nerve Terminals with Calcium Indicators. Journal of Visualized Experiments, 2007, , 250.	0.2	10
22	Neto-Î± Controls Synapse Organization and Homeostasis at the Drosophila Neuromuscular Junction. Cell Reports, 2020, 32, 107866.	2.9	8
23	Calcium Imaging at the Drosophila Larval Neuromuscular Junction. Cold Spring Harbor Protocols, 2012, 2012, pdb.top070078-pdb.top070078.	0.2	7
24	Computational modeling predicts ephemeral acidic microdomains in the glutamatergic synaptic cleft. Biophysical Journal, 2021, 120, 5575-5591.	0.2	5
25	Calcium-dependent phosphorylation regulates neuronal stability and plasticity in a highly precise pacemaker nucleus. Journal of Neurophysiology, 2011, 106, 319-331.	0.9	4
26	The application of â€˜kisserâ€™ probes for resolving the distribution and microenvironment of membrane proteins <i>in situ</i>. Journal of Neurogenetics, 2018, 32, 236-245.	0.6	4
27	Mitochondria: enigmatic stewards of the synaptic vesicle reserve pool. Frontiers in Synaptic Neuroscience, 2010, 2, 145.	1.3	2
28	Examining Mitochondrial Function at Synapses In Situ. Neuromethods, 2017, , 279-297.	0.2	2