

# George J Augustine

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/1153113/george-j-augustine-publications-by-citations.pdf>

**Version:** 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. 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.

85  
papers

6,531  
citations

40  
h-index

80  
g-index

96  
ext. papers

7,573  
ext. citations

8.9  
avg, IF

5.71  
L-index

#	Paper	IF	Citations
85	Cell type-specific channelrhodopsin-2 transgenic mice for optogenetic dissection of neural circuitry function. <i>Nature Methods</i> , <b>2011</b> , 8, 745-52	21.6	498
84	Local calcium signalling by inositol-1,4,5-trisphosphate in Purkinje cell dendrites. <i>Nature</i> , <b>1998</b> , 396, 753-60.4	60.4	458
83	Local calcium signaling in neurons. <i>Neuron</i> , <b>2003</b> , 40, 331-46	13.9	452
82	Synapsins as regulators of neurotransmitter release. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>1999</b> , 354, 269-79	5.8	409
81	Channel-mediated tonic GABA release from glia. <i>Science</i> , <b>2010</b> , 330, 790-6	33.3	369
80	A genetically encoded ratiometric indicator for chloride: capturing chloride transients in cultured hippocampal neurons. <i>Neuron</i> , <b>2000</b> , 27, 447-59	13.9	349
79	Different presynaptic roles of synapsins at excitatory and inhibitory synapses. <i>Journal of Neuroscience</i> , <b>2004</b> , 24, 11368-80	6.6	265
78	The calcium signal for transmitter secretion from presynaptic nerve terminals. <i>Annals of the New York Academy of Sciences</i> , <b>1991</b> , 635, 365-81	6.5	239
77	Local calcium release in dendritic spines required for long-term synaptic depression. <i>Neuron</i> , <b>2000</b> , 28, 233-44	13.9	217
76	Precise control of movement kinematics by optogenetic inhibition of Purkinje cell activity. <i>Journal of Neuroscience</i> , <b>2014</b> , 34, 2321-30	6.6	161
75	Progressive NKCC1-dependent neuronal chloride accumulation during neonatal seizures. <i>Journal of Neuroscience</i> , <b>2010</b> , 30, 11745-61	6.6	145
74	Synaptotagmin I synchronizes transmitter release in mouse hippocampal neurons. <i>Journal of Neuroscience</i> , <b>2004</b> , 24, 6127-32	6.6	137
73	Two sites of action for synapsin domain E in regulating neurotransmitter release. <i>Nature Neuroscience</i> , <b>1998</b> , 1, 29-35	25.5	136
72	Two-photon imaging reveals somatodendritic chloride gradient in retinal ON-type bipolar cells expressing the biosensor Clomeleon. <i>Neuron</i> , <b>2006</b> , 49, 81-94	13.9	136
71	Reversal of Phenotypic Abnormalities by CRISPR/Cas9-Mediated Gene Correction in Huntington Disease Patient-Derived Induced Pluripotent Stem Cells. <i>Stem Cell Reports</i> , <b>2017</b> , 8, 619-633	8	133
70	Regulation of neurotransmitter release by synapsin III. <i>Journal of Neuroscience</i> , <b>2002</b> , 22, 4372-80	6.6	122
69	Differences in cortical versus subcortical GABAergic signaling: a candidate mechanism of electroclinical uncoupling of neonatal seizures. <i>Neuron</i> , <b>2009</b> , 63, 657-72	13.9	114

68	The chloride transporter Na(+)-K(+)-Cl- cotransporter isoform-1 contributes to intracellular chloride increases after in vitro ischemia. <i>Journal of Neuroscience</i> , <b>2006</b> , 26, 1396-406	6.6	110
67	Structural domains involved in the regulation of transmitter release by synapsins. <i>Journal of Neuroscience</i> , <b>2005</b> , 25, 2658-69	6.6	109
66	Molecular determinants of synapsin targeting to presynaptic terminals. <i>Journal of Neuroscience</i> , <b>2004</b> , 24, 3711-20	6.6	107
65	A positive feedback signal transduction loop determines timing of cerebellar long-term depression. <i>Neuron</i> , <b>2008</b> , 59, 608-20	13.9	97
64	Ca <sup>2+</sup> requirements for cerebellar long-term synaptic depression: role for a postsynaptic leaky integrator. <i>Neuron</i> , <b>2007</b> , 54, 787-800	13.9	90
63	Synapsin IIa controls the reserve pool of glutamatergic synaptic vesicles. <i>Journal of Neuroscience</i> , <b>2008</b> , 28, 10835-43	6.6	87
62	Distribution of functional glutamate and GABA receptors on hippocampal pyramidal cells and interneurons. <i>Journal of Neurophysiology</i> , <b>2000</b> , 84, 28-38	3.2	82
61	Synapsins differentially control dopamine and serotonin release. <i>Journal of Neuroscience</i> , <b>2010</b> , 30, 9762-70	6.6	74
60	Imaging synaptic inhibition in transgenic mice expressing the chloride indicator, Clomeleon. <i>Brain Cell Biology</i> , <b>2006</b> , 35, 207-28		74
59	Contribution of superficial layer neurons to premotor bursts in the superior colliculus. <i>Journal of Neurophysiology</i> , <b>2000</b> , 84, 460-71	3.2	68
58	Visualization of synaptic inhibition with an optogenetic sensor developed by cell-free protein engineering automation. <i>Journal of Neuroscience</i> , <b>2013</b> , 33, 16297-309	6.6	63
57	Luminopsins integrate opto- and chemogenetics by using physical and biological light sources for opsin activation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, E358-67	11.5	60
56	Local excitatory circuits in the intermediate gray layer of the superior colliculus. <i>Journal of Neurophysiology</i> , <b>1999</b> , 81, 1424-7	3.2	60
55	Proteins involved in synaptic vesicle trafficking. <i>Journal of Physiology</i> , <b>1999</b> , 520 Pt 1, 33-41	3.9	59
54	Imaging synaptic inhibition throughout the brain via genetically targeted Clomeleon. <i>Brain Cell Biology</i> , <b>2008</b> , 36, 101-18		51
53	Inhibitory Basal Ganglia Inputs Induce Excitatory Motor Signals in the Thalamus. <i>Neuron</i> , <b>2017</b> , 95, 1181-1196.e8	13.9	50
52	Synapsin Isoforms and Synaptic Vesicle Trafficking. <i>Molecules and Cells</i> , <b>2015</b> , 38, 936-40	3.5	50
51	A neuroprotective role for microRNA miR-1000 mediated by limiting glutamate excitotoxicity. <i>Nature Neuroscience</i> , <b>2015</b> , 18, 379-85	25.5	48

50	Optogenetic probing of functional brain circuitry. <i>Experimental Physiology</i> , <b>2011</b> , 96, 26-33	2.4	48
49	Next-generation transgenic mice for optogenetic analysis of neural circuits. <i>Frontiers in Neural Circuits</i> , <b>2013</b> , 7, 160	3.5	46
48	The cerebellum linearly encodes whisker position during voluntary movement. <i>ELife</i> , <b>2016</b> , 5, e10509	8.9	45
47	Optogenetic mapping of cerebellar inhibitory circuitry reveals spatially biased coordination of interneurons via electrical synapses. <i>Cell Reports</i> , <b>2014</b> , 7, 1601-1613	10.6	44
46	STIM2 regulates PKA-dependent phosphorylation and trafficking of AMPARs. <i>Molecular Biology of the Cell</i> , <b>2015</b> , 26, 1141-59	3.5	41
45	Structural basis for delta cell paracrine regulation in pancreatic islets. <i>Nature Communications</i> , <b>2019</b> , 10, 3700	17.4	38
44	Tonically active protein kinase A regulates neurotransmitter release at the squid giant synapse. <i>Journal of Physiology</i> , <b>2001</b> , 531, 141-6	3.9	38
43	Graded Control of Climbing-Fiber-Mediated Plasticity and Learning by Inhibition in the Cerebellum. <i>Neuron</i> , <b>2018</b> , 99, 999-1015.e6	13.9	37
42	Optogenetic activation of presynaptic inputs in lateral amygdala forms associative fear memory. <i>Learning and Memory</i> , <b>2014</b> , 21, 627-33	2.8	36
41	Presynaptic nanodomains: a tale of two synapses. <i>Frontiers in Cellular Neuroscience</i> , <b>2014</b> , 8, 455	6.1	35
40	Precision of Discrete and Rhythmic Forelimb Movements Requires a Distinct Neuronal Subpopulation in the Interposed Anterior Nucleus. <i>Cell Reports</i> , <b>2018</b> , 22, 2322-2333	10.6	28
39	Serial processing of kinematic signals by cerebellar circuitry during voluntary whisking. <i>Nature Communications</i> , <b>2017</b> , 8, 232	17.4	26
38	Pancreatic Islet Blood Flow Dynamics in Primates. <i>Cell Reports</i> , <b>2017</b> , 20, 1490-1501	10.6	26
37	Protein tyrosine phosphatase receptor type R is required for Purkinje cell responsiveness in cerebellar long-term depression. <i>Molecular Brain</i> , <b>2015</b> , 8, 1	4.5	24
36	Optogenetics reveals a role for accumbal medium spiny neurons expressing dopamine D2 receptors in cocaine-induced behavioral sensitization. <i>Frontiers in Behavioral Neuroscience</i> , <b>2014</b> , 8, 336	3.5	23
35	Drosophila Schip1 Links Expanded and Tao-1 to Regulate Hippo Signaling. <i>Developmental Cell</i> , <b>2016</b> , 36, 511-24	10.2	22
34	Choline Ameliorates Disease Phenotypes in Human iPSC Models of Rett Syndrome. <i>NeuroMolecular Medicine</i> , <b>2016</b> , 18, 364-77	4.6	21
33	Selective Loss of Presynaptic Potassium Channel Clusters at the Cerebellar Basket Cell Terminal Pinceau in Adam11 Mutants Reveals Their Role in Ephaptic Control of Purkinje Cell Firing. <i>Journal of Neuroscience</i> , <b>2015</b> , 35, 11433-44	6.6	20

32	An excitatory GABA loop operating in vivo. <i>Frontiers in Cellular Neuroscience</i> , <b>2015</b> , 9, 275	6.1	20
31	Synapsin Isoforms Regulating GABA Release from Hippocampal Interneurons. <i>Journal of Neuroscience</i> , <b>2016</b> , 36, 6742-57	6.6	17
30	Roadmap on neurophotonics. <i>Journal of Optics (United Kingdom)</i> , <b>2016</b> , 18,	1.7	16
29	Optogenetic Visualization of Presynaptic Tonic Inhibition of Cerebellar Parallel Fibers. <i>Journal of Neuroscience</i> , <b>2016</b> , 36, 5709-23	6.6	15
28	Rescue of Methyl-CpG Binding Protein 2 Dysfunction-induced Defects in Newborn Neurons by Pentobarbital. <i>Neurotherapeutics</i> , <b>2015</b> , 12, 477-90	6.4	14
27	Calcium-Dependent and Synapsin-Dependent Pathways for the Presynaptic Actions of BDNF. <i>Frontiers in Cellular Neuroscience</i> , <b>2017</b> , 11, 75	6.1	13
26	Imaging synaptic inhibition with the genetically encoded chloride indicator Clomeleon. <i>Cold Spring Harbor Protocols</i> , <b>2011</b> , 2011, 1492-7	1.2	13
25	Synaptic Connectivity between the Cortex and Claustrum Is Organized into Functional Modules. <i>Current Biology</i> , <b>2020</b> , 30, 2777-2790.e4	6.3	13
24	Defining a critical period for inhibitory circuits within the somatosensory cortex. <i>Scientific Reports</i> , <b>2017</b> , 7, 7271	4.9	12
23	An optogenetic approach for assessing formation of neuronal connections in a co-culture system. <i>Journal of Visualized Experiments</i> , <b>2015</b> , e52408	1.6	12
22	Molecular Mechanisms of Short-Term Plasticity: Role of Synapsin Phosphorylation in Augmentation and Potentiation of Spontaneous Glutamate Release. <i>Frontiers in Synaptic Neuroscience</i> , <b>2018</b> , 10, 33	3.5	11
21	Molecular Layer Interneurons: Key Elements of Cerebellar Network Computation and Behavior. <i>Neuroscience</i> , <b>2021</b> , 462, 22-35	3.9	10
20	Non-invasive activation of optogenetic actuators. <i>Proceedings of SPIE</i> , <b>2014</b> , 8928,	1.7	9
19	A Novel Type of Neuron Within the Dorsal Striatum. <i>Frontiers in Neural Circuits</i> , <b>2019</b> , 13, 32	3.5	8
18	Identification of Mouse Claustral Neuron Types Based on Their Intrinsic Electrical Properties. <i>ENeuro</i> , <b>2020</b> , 7,	3.9	7
17	Functional properties, topological organization and sexual dimorphism of claustrum neurons projecting to anterior cingulate cortex <b>2017</b> , 2, 1357412		6
16	Calcium-dependent neurotransmitter release: Synaptotagmin to the rescue. <i>Journal of Comparative Neurology</i> , <b>2001</b> , 436, 1-3	3.4	6
15	Synapsins and the Synaptic Vesicle Reserve Pool: Floats or Anchors?. <i>Cells</i> , <b>2021</b> , 10,	7.9	5

14	All-optical mapping of barrel cortex circuits based on simultaneous voltage-sensitive dye imaging and channelrhodopsin-mediated photostimulation. <i>Neurophotonics</i> , <b>2015</b> , 2, 021013	3.9	4
13	A neural circuit for excessive feeding driven by environmental context in mice. <i>Nature Neuroscience</i> , <b>2021</b> , 24, 1132-1141	25.5	4
12	Postsynaptic Mechanisms Render Syn I/II/III Mice Highly Responsive to Psychostimulants. <i>International Journal of Neuropsychopharmacology</i> , <b>2019</b> , 22, 453-465	5.8	3
11	Heterogeneous somatostatin-expressing neuron population in mouse ventral tegmental area. <i>ELife</i> , <b>2020</b> , 9,	8.9	3
10	Neuroscience: A Role for the Claustrum in Drug Reward. <i>Current Biology</i> , <b>2020</b> , 30, R1038-R1040	6.3	2
9	Changing the Cortical Conductor's Tempo: Neuromodulation of the Claustrum. <i>Frontiers in Neural Circuits</i> , <b>2021</b> , 15, 658228	3.5	2
8	Optogenetics Enables Selective Control of Cellular Electrical Activity <b>2016</b> , 275-300		1
7	A functional logic for neurotransmitter co-release in the cholinergic forebrain pathway		1
6	Using Optogenetic Dyadic Animal Models to Elucidate the Neural Basis for Human Parent-Infant Social Knowledge Transmission. <i>Frontiers in Neural Circuits</i> , <b>2021</b> , 15, 731691	3.5	1
5	[P31168]: GENETIC DISSECTION OF SEVERITY AND ONSET MODULATORS FOR ALZHEIMER'S PATHOLOGY IN DOWN SYNDROME USING CELLULAR SYSTEMS <b>2017</b> , 13, P998-P999		
4	Brain cell technology: a valuable new resource for novel techniques. <i>Brain Cell Biology</i> , <b>2006</b> , 35, 205-6		
3	Synapsins (SYN) <b>2016</b> , 1-7		
2	An automated data extraction and classification pipeline to identify a novel type of neuron within the dorsal striatum based on single-cell patch clamp and confocal imaging data. <i>Data in Brief</i> , <b>2020</b> , 32, 106148	1.2	
1	C1 Scarless gene correction in huntington disease patient-derived induced pluripotent stem cells. <i>Journal of Neurology, Neurosurgery and Psychiatry</i> , <b>2016</b> , 87, A27.1-A27	5.5	