Jay R Gibson

List of Publications by Year
in descending order

33 papers	5,672 citations	257450 24 h-index	395702 33 g-index
36 all docs	36 docs citations	36 times ranked	5559 citing authors

#	Article	IF	Citations
1	Two networks of electrically coupled inhibitory neurons in neocortex. Nature, 1999, 402, 75-79.	27.8	1,314
2	Synchronous Activity of Inhibitory Networks in Neocortex Requires Electrical Synapses Containing Connexin36. Neuron, 2001, 31, 477-485.	8.1	533
3	Two Dynamically Distinct Inhibitory Networks in Layer 4 of the Neocortex. Journal of Neurophysiology, 2003, 90, 2987-3000.	1.8	530
4	Activity-Dependent Validation of Excitatory versus Inhibitory Synapses by Neuroligin-1 versus Neuroligin-2. Neuron, 2007, 54, 919-931.	8.1	511
5	A network of electrically coupled interneurons drives synchronized inhibition in neocortex. Nature Neuroscience, 2000, 3, 904-910.	14.8	462
6	Imbalance of Neocortical Excitation and Inhibition and Altered UP States Reflect Network Hyperexcitability in the Mouse Model of Fragile X Syndrome. Journal of Neurophysiology, 2008, 100, 2615-2626.	1.8	453
7	Disrupted Homer scaffolds mediate abnormal mGluR5 function in a mouse model of fragile X syndrome. Nature Neuroscience, 2012, 15, 431-440.	14.8	225
8	Functional Properties of Electrical Synapses Between Inhibitory Interneurons of Neocortical Layer 4. Journal of Neurophysiology, 2005, 93, 467-480.	1.8	209
9	Altered Neocortical Rhythmic Activity States in<i>Fmr1</i>KO Mice Are Due to Enhanced mGluR5 Signaling and Involve Changes in Excitatory Circuitry. Journal of Neuroscience, 2011, 31, 14223-14234.	3.6	155
10	Sensory Modality Specificity of Neural Activity Related to Memory in Visual Cortex. Journal of Neurophysiology, 1997, 78, 1263-1275.	1.8	153
11	Multiple Gq-Coupled Receptors Converge on a Common Protein Synthesis-Dependent Long-Term Depression That Is Affected in Fragile X Syndrome Mental Retardation. Journal of Neuroscience, 2007, 27, 11624-11634.	3.6	149
12	Neuroligin-2 Deletion Selectively Decreases Inhibitory Synaptic Transmission Originating from Fast-Spiking but Not from Somatostatin-Positive Interneurons. Journal of Neuroscience, 2009, 29, 13883-13897.	3.6	144
13	Increased Expression of the PI3K Enhancer PIKE Mediates Deficits in Synaptic Plasticity and Behavior in Fragile X Syndrome. Cell Reports, 2015, 11, 727-736.	6.4	97
14	FoxP1 orchestration of ASD-relevant signaling pathways in the striatum. Genes and Development, 2015, 29, 2081-2096.	5.9	91
15	Selective Role of the Catalytic PI3K Subunit p110Î² in Impaired Higher Order Cognition in Fragile X Syndrome. Cell Reports, 2015, 11, 681-688.	6.4	72
16	A dual shaping mechanism for postsynaptic ephrin-B3 as a receptor that sculpts dendrites and synapses. Nature Neuroscience, 2011, 14, 1421-1429.	14.8	69
17	A Target Cell-Specific Role for Presynaptic<i>Fmr1</i>in Regulating Glutamate Release onto Neocortical Fast-Spiking Inhibitory Neurons. Journal of Neuroscience, 2013, 33, 2593-2604.	3.6	69
18	Differential Activity-Dependent, Homeostatic Plasticity of Two Neocortical Inhibitory Circuits. Journal of Neurophysiology, 2008, 100, 1983-1994.	1.8	67

#	Article	IF	Citations
19	A Role for Dendritic mGluR5-Mediated Local Translation of Arc/Arg3.1 in MEF2-Dependent Synapse Elimination. Cell Reports, 2014, 7, 1589-1600.	6.4	58
20	Postsynaptic FMRP Promotes the Pruning of Cell-to-Cell Connections among Pyramidal Neurons in the L5A Neocortical Network. Journal of Neuroscience, 2014, 34, 3413-3418.	3.6	56
21	Local cortical circuit correlates of altered EEG in the mouse model of Fragile X syndrome. Neurobiology of Disease, 2019, 124, 563-572.	4.4	39
22	Increased Cortical Inhibition in Autism-Linked Neuroligin-3R451C Mice Is Due in Part to Loss of Endocannabinoid Signaling. PLoS ONE, 2015, 10, e0140638.	2.5	38
23	Audiogenic Seizures in the<i>Fmr1</i>Knock-Out Mouse Are Induced by<i>Fmr1</i>Deletion in Subcortical, VGlut2-Expressing Excitatory Neurons and Require Deletion in the Inferior Colliculus. Journal of Neuroscience, 2019, 39, 9852-9863.	3.6	38
24	Experience-Dependent and Differential Regulation of Local and Long-Range Excitatory Neocortical Circuits by Postsynaptic Mef2c. Neuron, 2017, 93, 48-56.	8.1	32
25	Role for the Subthreshold Currents ILeak and IH in the Homeostatic Control of Excitability in Neocortical Somatostatin-Positive Inhibitory Neurons. Journal of Neurophysiology, 2006, 96, 420-432.	1.8	26
26	APP Causes Hyperexcitability in Fragile X Mice. Frontiers in Molecular Neuroscience, 2016, 9, 147.	2.9	24
27	Distinct stages of synapse elimination are induced by burst firing of CA1 neurons and differentially require MEF2A/D. ELife, 2017, 6, .	6.0	16
28	Autonomous and non-autonomous roles for ephrin-B in interneuron migration. Developmental Biology, 2017, 431, 179-193.	2.0	11
29	FOXP1 negatively regulates intrinsic excitability in D2 striatal projection neurons by promoting inwardly rectifying and leak potassium currents. Molecular Psychiatry, 2021, 26, 1761-1774.	7.9	9
30	Postsynaptic mGluR5 promotes evoked AMPAR-mediated synaptic transmission onto neocortical layer 2/3 pyramidal neurons during development. Journal of Neurophysiology, 2015, 113, 786-795.	1.8	6
31	GABAA Alpha 2,3 Modulation Improves Select Phenotypes in a Mouse Model of Fragile X Syndrome. Frontiers in Psychiatry, 2021, 12, 678090.	2.6	6
32	Experience-dependent weakening of callosal synaptic connections in the absence of postsynaptic FMRP. ELife, 2021, 10, .	6.0	5
33	A sound-driven cortical phase-locking change in the Fmr1 KO mouse requires Fmr1 deletion in a subpopulation of brainstem neurons. Neurobiology of Disease, 2022, 170, 105767.	4.4	4