Lu Chen

List of Publications by Year
in descending order

44 papers	6,503 citations	147801 31 h-index	243625 44 g-index
74 all docs	74 docs citations	74 times ranked	7540 citing authors

#	Article	IF	Citations
1	Identification of cis-regulatory modules for adeno-associated virus-based cell-type-specific targeting in the retina and brain. Journal of Biological Chemistry, 2022, 298, 101674.	3.4	3
2	Homeostatic plasticity and excitation-inhibition balance: The good, the bad, and the ugly. Current Opinion in Neurobiology, 2022, 75, 102553.	4.2	25
3	Cell-type-specific profiling of human cellular models of fragile X syndrome reveal PI3K-dependent defects in translation and neurogenesis. Cell Reports, 2021, 35, 108991.	6.4	36
4	An analog of psychedelics restores functional neural circuits disrupted by unpredictable stress. Molecular Psychiatry, 2021, 26, 6237-6252.	7.9	39
5	FMRP Interacts with RARÎ± in Synaptic Retinoic Acid Signaling and Homeostatic Synaptic Plasticity. International Journal of Molecular Sciences, 2021, 22, 6579.	4.1	5
6	The Quest for the Hippocampal Memory Engram: From Theories to Experimental Evidence. Frontiers in Behavioral Neuroscience, 2020, 14, 632019.	2.0	16
7	Defective memory engram reactivation underlies impaired fear memory recall in Fragile X syndrome. ELife, 2020, 9, .	6.0	14
8	Kinase pathway inhibition restores PSD95 induction in neurons lacking fragile X mental retardation protein. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 12007-12012.	7.1	5
9	Synaptic retinoic acid receptor signaling mediates mTOR-dependent metaplasticity that controls hippocampal learning. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 7113-7122.	7.1	40
10	Homeostatic synaptic plasticity as a metaplasticity mechanismâ€‰â€”â€‰a molecular and cellular perspective. Current Opinion in Neurobiology, 2019, 54, 44-53.	4.2	65
11	Retinoic Acid Receptor RARÎ±-Dependent Synaptic Signaling Mediates Homeostatic Synaptic Plasticity at the Inhibitory Synapses of Mouse Visual Cortex. Journal of Neuroscience, 2018, 38, 10454-10466.	3.6	36
12	The fragile X mutation impairs homeostatic plasticity in human neurons by blocking synaptic retinoic acid signaling. Science Translational Medicine, 2018, 10, .	12.4	79
13	Postnatal Ablation of Synaptic Retinoic Acid Signaling Impairs Cortical Information Processing and Sensory Discrimination in Mice. Journal of Neuroscience, 2018, 38, 5277-5288.	3.6	10
14	A metaplasticity view of the interaction between homeostatic and Hebbian plasticity. Philosophical Transactions of the Royal Society B: Biological Sciences, 2017, 372, 20160155.	4.0	57
15	The Retromer Supports AMPA Receptor Trafficking During LTP. Neuron, 2017, 94, 74-82.e5.	8.1	74
16	Postsynaptic synaptotagmins mediate AMPA receptor exocytosis during LTP. Nature, 2017, 544, 316-321.	27.8	153
17	Differential regulation of spontaneous and evoked inhibitory synaptic transmission in somatosensory cortex by retinoic acid. Synapse, 2016, 70, 445-452.	1.2	12
18	Î²-Neurexins Control Neural Circuits by Regulating Synaptic Endocannabinoid Signaling. Cell, 2015, 162, 593-606.	28.9	123

#	Article	IF	Citations
19	Retinoic Acid and LTP Recruit Postsynaptic AMPA Receptors Using Distinct SNARE-Dependent Mechanisms. Neuron, 2015, 86, 442-456.	8.1	72
20	Aldehyde dehydrogenase 1a1 mediates a GABA synthesis pathway in midbrain dopaminergic neurons. Science, 2015, 350, 102-106.	12.6	182
21	Calcineurin mediates homeostatic synaptic plasticity by regulating retinoic acid synthesis. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E5744-52.	7.1	50
22	Synaptic retinoic acid signaling and homeostatic synaptic plasticity. Neuropharmacology, 2014, 78, 3-12.	4.1	109
23	Rapid Suppression of Inhibitory Synaptic Transmission by Retinoic Acid. Journal of Neuroscience, 2013, 33, 11440-11450.	3.6	63
24	Accelerated Experience-Dependent Pruning of Cortical Synapses in Ephrin-A2 Knockout Mice. Neuron, 2013, 80, 64-71.	8.1	48
25	Chronic Inactivation of a Neural Circuit Enhances LTP by Inducing Silent Synapse Formation. Journal of Neuroscience, 2013, 33, 2087-2096.	3.6	63
26	Rapid Single-Step Induction of Functional Neurons from Human Pluripotent Stem Cells. Neuron, 2013, 78, 785-798.	8.1	1,209
27	AMPA receptor/TARP stoichiometry visualized by single-molecule subunit counting. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 5163-5168.	7.1	79
28	Conditional RARÎ± knockout mice reveal acute requirement for retinoic acid and RARÎ± in homeostatic plasticity. Frontiers in Molecular Neuroscience, 2012, 5, 16.	2.9	39
29	Acute knockdown of AMPA receptors reveals a trans-synaptic signal for presynaptic maturation. EMBO Journal, 2011, 30, 1577-1592.	7.8	29
30	Decrease in Calcium Concentration Triggers Neuronal Retinoic Acid Synthesis during Homeostatic Synaptic Plasticity. Journal of Neuroscience, 2011, 31, 17764-17771.	3.6	94
31	Fragile X Protein FMRP Is Required for Homeostatic Plasticity and Regulation of Synaptic Strength by Retinoic Acid. Journal of Neuroscience, 2010, 30, 16910-16921.	3.6	160
32	Synaptic Signaling by All-Trans Retinoic Acid in Homeostatic Synaptic Plasticity. Neuron, 2008, 60, 308-320.	8.1	324
33	Retinoic acid regulates RARÎ±-mediated control of translation in dendritic RNA granules during homeostatic synaptic plasticity. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 16015-16020.	7.1	121
34	Retinoic acid-gated sequence-specific translational control by RARÎ±. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 20303-20308.	7.1	120
35	Postsynaptic EphrinB3 Promotes Shaft Glutamatergic Synapse Formation. Journal of Neuroscience, 2007, 27, 7508-7519.	3.6	82
36	Synaptic Trafficking of AMPA Receptors. , 2007, , 175-201.		2

#	Article	IF	Citations
37	Bidirectional ephrin/Eph signaling in synaptic functions. Brain Research, 2007, 1184, 72-80.	2.2	60
38	Dynamics of postsynaptic glutamate receptor targeting. Current Opinion in Neurobiology, 2007, 17, 53-58.	4.2	25
39	Postsynaptic assembly induced by neurexin-neuroligin interaction and neurotransmitter. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 6137-6142.	7.1	281
40	Functional studies and distribution define a family of transmembrane AMPA receptor regulatory proteins. Journal of Cell Biology, 2003, 161, 805-816.	5.2	486
41	Stargazin Differentially Controls the Trafficking of Î±-Amino-3-hydroxyl-5-methyl-4-isoxazolepropionate and Kainate Receptors. Molecular Pharmacology, 2003, 64, 703-706.	2.3	72
42	Direct interactions between PSD-95 and stargazin control synaptic AMPA receptor number. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 13902-13907.	7.1	656
43	Phosphorylation of the Postsynaptic Density-95 (PSD-95)/Discs Large/Zona Occludens-1 Binding Site of Stargazin Regulates Binding to PSD-95 and Synaptic Targeting of AMPA Receptors. Journal of Neuroscience, 2002, 22, 5791-5796.	3.6	142
44	Stargazin regulates synaptic targeting of AMPA receptors by two distinct mechanisms. Nature, 2000, 408, 936-943.	27.8	975