Ji Won Um

List of Publications by Year
in descending order

54 papers	3,414 citations	218677 26 h-index	168389 53 g-index
57 all docs	57 docs citations	57 times ranked	5042 citing authors

#	Article	IF	Citations
1	LRRTM3 regulates activity-dependent synchronization of synapse properties in topographically connected hippocampal neural circuits. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	5
2	MDGA1 negatively regulates amyloid precursor proteinâ€“mediated synapse inhibition in the hippocampus. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	12
3	IQSEC3 Deletion Impairs Fear Memory Through Upregulation of Ribosomal S6K1 Signaling in the Hippocampus. Biological Psychiatry, 2022, 91, 821-831.	1.3	6
4	Reassessing synaptic adhesion pathways. Trends in Neurosciences, 2022, 45, 517-528.	8.6	5
5	SLITRK2 variants associated with neurodevelopmental disorders impair excitatory synaptic function and cognition in mice. Nature Communications, 2022, 13, .	12.8	6
6	Impaired formation of high-order gephyrin oligomers underlies gephyrin dysfunction-associated pathologies. IScience, 2021, 24, 102037.	4.1	8
7	Proper synaptic adhesion signaling in the control of neural circuit architecture and brain function. Progress in Neurobiology, 2021, 200, 101983.	5.7	28
8	Npas4 regulates IQSEC3 expression in hippocampal somatostatin interneurons to mediate anxiety-like behavior. Cell Reports, 2021, 36, 109417.	6.4	10
9	The small GTPase ARF6 regulates GABAergic synapse development. Molecular Brain, 2020, 13, 2.	2.6	12
10	LAR-RPTPs Directly Interact with Neurexins to Coordinate Bidirectional Assembly of Molecular Machineries. Journal of Neuroscience, 2020, 40, 8438-8462.	3.6	25
11	PTPÏƒ Controls Presynaptic Organization of Neurotransmitter Release Machinery at Excitatory Synapses. IScience, 2020, 23, 101203.	4.1	16
12	Protocol for Quantitative Analysis of Synaptic Vesicle Clustering in Axons of Cultured Neurons. STAR Protocols, 2020, 1, 100095.	1.2	4
13	Differentially altered social dominance- and cooperative-like behaviors in Shank2- and Shank3-mutant mice. Molecular Autism, 2020, 11, 87.	4.9	24
14	Calsyntenin-3 interacts with both Î±- and Î²-neurexins in the regulation of excitatory synaptic innervation in specific Schaffer collateral pathways. Journal of Biological Chemistry, 2020, 295, 9244-9262.	3.4	14
15	Receptor protein tyrosine phosphatase delta is not essential for synapse maintenance or transmission at hippocampal synapses. Molecular Brain, 2020, 13, 94.	2.6	8
16	Seizure progression triggered by <scp>IQSEC3</scp> loss is mitigated by reducing activated microglia in mice. Glia, 2020, 68, 2661-2673.	4.9	7
17	Loss of IQSEC3 Disrupts GABAergic Synapse Maintenance and Decreases Somatostatin Expression in the Hippocampus. Cell Reports, 2020, 30, 1995-2005.e5.	6.4	16
18	Intracellular protein complexes involved in synapse assembly in presynaptic neurons. Advances in Protein Chemistry and Structural Biology, 2019, 116, 347-373.	2.3	13

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19	Slitrk2 controls excitatory synapse development via PDZ-mediated protein interactions. Scientific Reports, 2019, 9, 17094.	3.3	11
20	Rescue of Transgenic Alzheimerâ€™s Pathophysiology by Polymeric Cellular Prion Protein Antagonists. Cell Reports, 2019, 26, 145-158.e8.	6.4	27
21	PTPÏƒ Drives Excitatory Presynaptic Assembly via Various Extracellular and Intracellular Mechanisms. Journal of Neuroscience, 2018, 38, 6700-6721.	3.6	40
22	Synapse development organized by neuronal activity-regulated immediate-early genes. Experimental and Molecular Medicine, 2018, 50, 1-7.	7.7	40
23	Structural Insights into Modulation of Neurexin-Neuroligin Trans -synaptic Adhesion by MDGA1/Neuroligin-2 Complex. Neuron, 2017, 94, 1121-1131.e6.	8.1	48
24	Neural Glycosylphosphatidylinositol-Anchored Proteins in Synaptic Specification. Trends in Cell Biology, 2017, 27, 931-945.	7.9	58
25	Synaptic functions of the IQSEC family of ADP-ribosylation factor guanine nucleotide exchange factors. Neuroscience Research, 2017, 116, 54-59.	1.9	27
26	LAR-RPTP Clustering Is Modulated by Competitive Binding between Synaptic Adhesion Partners and Heparan Sulfate. Frontiers in Molecular Neuroscience, 2017, 10, 327.	2.9	25
27	Roles of Glial Cells in Sculpting Inhibitory Synapses and Neural Circuits. Frontiers in Molecular Neuroscience, 2017, 10, 381.	2.9	34
28	Slitrk Missense Mutations Associated with Neuropsychiatric Disorders Distinctively Impair Slitrk Trafficking and Synapse Formation. Frontiers in Molecular Neuroscience, 2016, 9, 104.	2.9	31
29	SALM4 suppresses excitatory synapse development by cis-inhibiting trans-synaptic SALM3â€“LAR adhesion. Nature Communications, 2016, 7, 12328.	12.8	30
30	IQ Motif and SEC7 Domain-containing Protein 3 (IQSEC3) Interacts with Gephyrin to Promote Inhibitory Synapse Formation. Journal of Biological Chemistry, 2016, 291, 10119-10130.	3.4	27
31	Neurotrophin-3 Regulates Synapse Development by Modulating TrkC-PTPÏƒ Synaptic Adhesion and Intracellular Signaling Pathways. Journal of Neuroscience, 2016, 36, 4816-4831.	3.6	56
32	SALM5 trans-synaptically interacts with LAR-RPTPs in a splicing-dependent manner to regulate synapse development. Scientific Reports, 2016, 6, 26676.	3.3	60
33	LRRTM3 Regulates Excitatory Synapse Development through Alternative Splicing and Neurexin Binding. Cell Reports, 2016, 14, 808-822.	6.4	61
34	Metabotropic glutamate receptor 5 couples cellular prion protein to intracellular signalling in Alzheimerâ€™s disease. Brain, 2016, 139, 526-546.	7.6	110
35	PTPÏƒ functions as a presynaptic receptor for the glypican-4/LRRTM4 complex and is essential for excitatory synaptic transmission. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 1874-1879.	7.1	86
36	The balancing act of GABAergic synapse organizers. Trends in Molecular Medicine, 2015, 21, 256-268.	6.7	83

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37	Structural basis for LAR-RPTP/Slitrk complex-mediated synaptic adhesion. Nature Communications, 2014, 5, 5423.	12.8	94
38	Elfn1 recruits presynaptic mGluR7 in trans and its loss results in seizures. Nature Communications, 2014, 5, 4501.	12.8	83
39	Calsyntenins Function as Synaptogenic Adhesion Molecules in Concert with Neurexins. Cell Reports, 2014, 6, 1096-1109.	6.4	71
40	LAR-RPTPs: synaptic adhesion molecules that shape synapse development. Trends in Cell Biology, 2013, 23, 465-475.	7.9	183
41	Metabotropic Glutamate Receptor 5 Is a Coreceptor for Alzheimer AÎ² Oligomer Bound to Cellular Prion Protein. Neuron, 2013, 79, 887-902.	8.1	485
42	Amyloid-Î² induced signaling by cellular prion protein and Fyn kinase in Alzheimer disease. Prion, 2013, 7, 37-41.	1.8	114
43	Alzheimer amyloid-Î² oligomer bound to postsynaptic prion protein activates Fyn to impair neurons. Nature Neuroscience, 2012, 15, 1227-1235.	14.8	572
44	Neddylation positively regulates the ubiquitin E3 ligase activity of parkin. Journal of Neuroscience Research, 2012, 90, 1030-1042.	2.9	43
45	ASK1 Negatively Regulates the 26 S Proteasome. Journal of Biological Chemistry, 2010, 285, 36434-36446.	3.4	41
46	Parkin Directly Modulates 26S Proteasome Activity. Journal of Neuroscience, 2010, 30, 11805-11814.	3.6	71
47	Formation of parkin aggregates and enhanced PINK1 accumulation during the pathogenesis of Parkinsonâ€™s disease. Biochemical and Biophysical Research Communications, 2010, 393, 824-828.	2.1	23
48	Molecular interaction between parkin and PINK1 in mammalian neuronal cells. Molecular and Cellular Neurosciences, 2009, 40, 421-432.	2.2	62
49	NF-Î°B-inducing Kinase Phosphorylates and Blocks the Degradation of Down Syndrome Candidate Region 1. Journal of Biological Chemistry, 2008, 283, 3392-3400.	3.4	38
50	Functional modulation of parkin through physical interaction with SUMO-1. Journal of Neuroscience Research, 2006, 84, 1543-1554.	2.9	91
51	Parkin Ubiquitinates and Promotes the Degradation of RanBP2. Journal of Biological Chemistry, 2006, 281, 3595-3603.	3.4	84
52	Proteolytic Cleavage of Extracellular Secreted Î±-Synuclein via Matrix Metalloproteinases. Journal of Biological Chemistry, 2005, 280, 25216-25224.	3.4	209
53	Parkin Cleaves Intracellular Î±-Synuclein Inclusions via the Activation of Calpain. Journal of Biological Chemistry, 2003, 278, 41890-41899.	3.4	68
54	Differential Regional Vulnerability of the Brain to Mild Neuroinflammation Induced by Systemic LPS Treatment in Mice. Journal of Inflammation Research, 0, Volume 15, 3053-3063.	3.5	7