Hiroko Bannai

List of Publications by Year
in descending order

32 papers	1,560 citations	430874 18 h-index	501196 28 g-index
33 all docs	33 docs citations	33 times ranked	2458 citing authors

#	Article	IF	Citations
1	Activity-Dependent Tuning of Inhibitory Neurotransmission Based on GABAAR Diffusion Dynamics. Neuron, 2009, 62, 670-682.	8.1	252
2	Imaging the lateral diffusion of membrane molecules with quantum dots. Nature Protocols, 2006, 1, 2628-2634.	12.0	147
3	Homeostatic Regulation of Synaptic GlyR Numbers Driven by Lateral Diffusion. Neuron, 2008, 59, 261-273.	8.1	109
4	Astrocytic IP₃Rs: Contribution to Ca²⁺ signalling and hippocampal LTP. Glia, 2017, 65, 502-513.	4.9	105
5	An RNA-interacting Protein, SYNCRIP (Heterogeneous Nuclear Ribonuclear Protein Q1/NSAP1) Is a Component of mRNA Granule Transported with Inositol 1,4,5-Trisphosphate Receptor Type 1 mRNA in Neuronal Dendrites. Journal of Biological Chemistry, 2004, 279, 53427-53434.	3.4	93
6	Kinesin dependent, rapid, bi-directional transport of ER sub-compartment in dendrites of hippocampal neurons. Journal of Cell Science, 2004, 117, 163-175.	2.0	92
7	Bidirectional Control of Synaptic GABAAR Clustering by Glutamate and Calcium. Cell Reports, 2015, 13, 2768-2780.	6.4	88
8	The regulatory domain of the inositol 1,4,5-trisphosphate receptor is necessary to keep the channel domain closed: possible physiological significance of specific cleavage by caspase 3. Biochemical Journal, 2004, 377, 299-307.	3.7	80
9	Lateral Diffusion of Inositol 1,4,5-Trisphosphate Receptor Type 1 Is Regulated by Actin Filaments and 4.1N in Neuronal Dendrites. Journal of Biological Chemistry, 2004, 279, 48976-48982.	3.4	77
10	Protein 4.1N Is Required for Translocation of Inositol 1,4,5-Trisphosphate Receptor Type 1 to the Basolateral Membrane Domain in Polarized Madin-Darby Canine Kidney Cells. Journal of Biological Chemistry, 2003, 278, 4048-4056.	3.4	72
11	Cluster Formation of Inositol 1,4,5-Trisphosphate Receptor Requires Its Transition to Open State. Journal of Biological Chemistry, 2005, 280, 6816-6822.	3.4	70
12	Spatiotemporal calcium dynamics in single astrocytes and its modulation by neuronal activity. Cell Calcium, 2014, 55, 119-129.	2.4	61
13	Receptor-Selective Diffusion Barrier Enhances Sensitivity of Astrocytic Processes to Metabotropic Glutamate Receptor Stimulation. Science Signaling, 2012, 5, ra27.	3.6	58
14	Diffusion Barriers Constrain Receptors at Synapses. PLoS ONE, 2012, 7, e43032.	2.5	52
15	Gephyrin-Independent GABAAR Mobility and Clustering during Plasticity. PLoS ONE, 2012, 7, e36148.	2.5	47
16	Basal ryanodine receptor activity suppresses autophagic flux. Biochemical Pharmacology, 2017, 132, 133-142.	4.4	31
17	Astroglial Ca 2+ signaling is generated by the coordination of IP 3 R and store-operated Ca 2+ channels. Biochemical and Biophysical Research Communications, 2017, 486, 879-885.	2.1	22
18	4.1N binding regions of inositol 1,4,5-trisphosphate receptor type 1. Biochemical and Biophysical Research Communications, 2006, 342, 573-576.	2.1	20

#	Article	IF	Citations
19	Type 2 inositol 1,4,5-trisphosphate receptor is predominantly involved in agonist-induced Ca2+ signaling in Bergmann glia. Neuroscience Research, 2012, 74, 32-41.	1.9	16
20	Molecular membrane dynamics: Insights into synaptic function and neuropathological disease. Neuroscience Research, 2018, 129, 47-56.	1.9	14
21	Dissection of local Ca2+ signals inside cytosol by ER-targeted Ca2+ indicator. Biochemical and Biophysical Research Communications, 2016, 479, 67-73.	2.1	12
22	Lateral diffusion of inositol 1,4,5â€trisphosphate receptor type 1 in Purkinje cells is regulated by calcium and actin filaments. Journal of Neurochemistry, 2010, 114, 1720-1733.	3.9	11
23	Imaging mGluR5 Dynamics in Astrocytes Using Quantum Dots. Current Protocols in Neuroscience, 2014, 66, 2.21.1-2.21.18.	2.6	10
24	Cooperative and Stochastic Calcium Releases from Multiple Calcium Puff Sites Generate Calcium Microdomains in Intact HeLa Cells. Journal of Biological Chemistry, 2012, 287, 24563-24572.	3.4	6
25	Optimal microscopic systems for long-term imaging of intracellular calcium using a ratiometric genetically-encoded calcium indicator. Biochemical and Biophysical Research Communications, 2013, 434, 252-257.	2.1	6
26	Dissection of Local Ca²⁺ Signals in Cultured Cells by Membrane-targeted Ca²⁺ Indicators. Journal of Visualized Experiments, 2019, , .	0.3	4
27	Inhibitory synaptic transmission tuned by Ca 2+ and glutamate through the control of GABA A R lateral diffusion dynamics. Development Growth and Differentiation, 2020, 62, 398-406.	1.5	3
28	Synaptic Function and Neuropathological Disease Revealed by Quantum Dot-Single-Particle Tracking. Neuromethods, 2020, , 131-155.	0.3	2
29	Editorial: Neuroscience and Neurotechnology of Neuronal Cell Surface Molecules in Neural Circuits. Frontiers in Neural Circuits, 2021, 15, 703300.	2.8	0
30	1SH-05 Membrane molecular dynamics supporting brain functions revealed by single molecule imaging in live cells(1SH Visualizing proteins in action -frontiers in biomolecular imaging-,The 49th Annual) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.1	0
31	Biophysics Opens up the Future of Brain Science. Seibutsu Butsuri, 2012, 52, 112-113.	0.1	0
32	Diffusion Barrier Compartmentalizes Signals in Astrocytes. Seibutsu Butsuri, 2013, 53, 105-106.	0.1	0