Ruth M Empson

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2593534/publications.pdf

Version: 2024-02-01

64 papers	3,383 citations	147801 31 h-index	155660 55 g-index
67 all docs	67 docs citations	67 times ranked	4463 citing authors

#	Article	IF	Citations
1	Transgenic Mice for Intersectional Targeting of Neural Sensors and Effectors with High Specificity and Performance. Neuron, 2015, 85, 942-958.	8.1	992
2	Unique Inactivation Properties of NAADP-sensitive Ca2+ Release. Journal of Biological Chemistry, 1996, 271, 11599-11602.	3.4	153
3	Diversity of layer 5 projection neurons in the mouse motor cortex. Frontiers in Cellular Neuroscience, 2013, 7, 174.	3.7	145
4	Morphological and electrophysiological characterization of layer III cells of the medial entorhinal cortex of the rat. Neuroscience, 1997, 77, 629-648.	2.3	98
5	Evidence of a role for cyclic ADP-ribose in long-term synaptic depression in hippocampus. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 4061-4066.	7.1	93
6	Amyloid-Î² Acts as a Regulator of Neurotransmitter Release Disrupting the Interaction between Synaptophysin and VAMP2. PLoS ONE, 2012, 7, e43201.	2.5	91
7	Nicotinamide inhibits cyclic ADP-ribose-mediated calcium signalling in sea urchin eggs. Biochemical Journal, 1996, 319, 613-617.	3.7	88
8	Voltage imaging to understand connections and functions of neuronal circuits. Journal of Neurophysiology, 2016, 116, 135-152.	1.8	80
9	7-Deaza-8-bromo-cyclic ADP-ribose, the First Membrane-permeant, Hydrolysis-resistant Cyclic ADP-ribose Antagonist. Journal of Biological Chemistry, 1997, 272, 16358-16363.	3.4	73
10	Functional Phenotype in Transgenic Mice Expressing Mutant Human Presenilin-1. Neurobiology of Disease, 2000, 7, 119-126.	4.4	68
11	The NO Pathway Acts Late during the Fertilization Response in Sea Urchin Eggs. Journal of Biological Chemistry, 2003, 278, 12247-12254.	3.4	67
12	Serotonin and 8-OH-DPAT reduce excitatory transmission in rat hippocampal area CA1 via reduction in presumed presynaptic Ca2+ entry. Brain Research, 1995, 701, 249-254.	2.2	65
13	Frequency-Dependent Information Flow From the Entorhinal Cortex to the Hippocampus. Journal of Neurophysiology, 1997, 78, 3444-3449.	1.8	65
14	Adenosine acting via A1 receptors, controls the transition to status epilepticus-like behaviour in an in vitro model of epilepsy. Neuropharmacology, 2004, 47, 427-437.	4.1	65
15	Injection of tetanus toxin into the neocortex elicits persistent epileptiform activity but only transient impairment of GABA release. Neuroscience, 1993, 57, 235-239.	2.3	56
16	Cyclic ADP-ribose Enhances Coupling between Voltage-gated Ca2+ Entry and Intracellular Ca2+ Release. Journal of Biological Chemistry, 1997, 272, 20967-20970.	3.4	56
17	Enzymatically-mediated uranium accumulation and uranium recovery using aCitrobacter sp. Immobilised as a biofilm within a plug-flow reactor. Journal of Chemical Technology and Biotechnology, 1995, 63, 1-16.	3.2	55
18	Serotonin reduces synaptic excitation in the superficial medial entorhinal cortex of the rat via a presynaptic mechanism. Journal of Physiology, 1998, 508, 119-129.	2.9	51

#	Article	IF	Citations
19	Plasma Membrane Ca2+ ATPase 2 Contributes to Short-Term Synapse Plasticity at the Parallel Fiber to Purkinje Neuron Synapse. Journal of Neuroscience, 2007, 27, 3753-3758.	3.6	51
20	Ca2+ entry through l-type Ca2+ channels helps terminate epileptiform activity by activation of a Ca2+ dependent afterhyperpolarisation in hippocampal CA3.. Neuroscience, 2001, 102, 297-306.	2.3	50
21	Presynaptic plasma membrane Ca2+ATPase isoform 2a regulates excitatory synaptic transmission in rat hippocampal CA3. Journal of Physiology, 2007, 579, 85-99.	2.9	50
22	Perforant path connections to area CA1 are predominantly inhibitory in the rat hippocampal-entorhinal cortex combined slice preparation. Hippocampus, 1995, 5, 104-107.	1.9	49
23	The cell adhesion molecule neuroplastin-65 inhibits hippocampal long-term potentiation via a mitogen-activated protein kinase p38-dependent reduction in surface expression of GluR1-containing glutamate receptors. Journal of Neurochemistry, 2006, 99, 850-860.	3.9	49
24	Prolonged Type 1 Metabotropic Glutamate Receptor Dependent Synaptic Signaling Contributes to Spino-Cerebellar Ataxia Type 1. Journal of Neuroscience, 2016, 36, 4910-4916.	3.6	47
25	Synaptic inhibition in primary and secondary chronic epileptic foci induced by intrahippocampal tetanus toxin in the rat.. Journal of Physiology, 1993, 465, 595-614.	2.9	45
26	Molecular interactions of the plasma membrane calcium ATPase 2 at pre- and post-synaptic sites in rat cerebellum. Neuroscience, 2009, 162, 383-395.	2.3	39
27	Expression of plasma membrane Ca2+ ATPase family members and associated synaptic proteins in acute and cultured organotypic hippocampal slices from rat. Developmental Brain Research, 2004, 152, 129-136.	1.7	37
28	Electrophysiological properties of rat subicular neurons in vitro. Neuroscience Letters, 1996, 220, 41-44.	2.1	35
29	Serotonin blocks different patterns of low Mg2+-induced epileptiform activity in rat entorhinal cortex, but not hippocampus. Neuroscience, 1997, 76, 449-458.	2.3	35
30	Reduced expression of the Ca²⁺transporter protein PMCA2 slows Ca²⁺dynamics in mouse cerebellar Purkinje neurones and alters the precision of motor coordination. Journal of Physiology, 2010, 588, 907-922.	2.9	35
31	Expression of the Developmental Transcription FactorFezf2Identifies a Distinct Subpopulation of Layer 5 Intratelencephalic-Projection Neurons in Mature Mouse Motor Cortex. Journal of Neuroscience, 2014, 34, 4303-4308.	3.6	35
32	Fezf2 expression in layer 5 projection neurons of mature mouse motor cortex. Journal of Comparative Neurology, 2016, 524, 829-845.	1.6	32
33	Serotonin reduces synaptic excitation of principal cells in the superficial layers of rat hippocampal-entorhinal cortex combined slices. Neuroscience Letters, 1995, 190, 37-40.	2.1	31
34	Comparison of the effects of serotonin in the hippocampus and the entorhinal cortex. Molecular Neurobiology, 1998, 17, 59-72.	4.0	31
35	Pentobarbitone modulates calcium transients in axons and synaptic boutons of hippocampal CA1 neurons. British Journal of Pharmacology, 2003, 140, 971-979.	5.4	30
36	Network stability through homeostatic scaling of excitatory and inhibitory synapses following inactivity in CA3 of rat organotypic hippocampal slice cultures. Molecular and Cellular Neurosciences, 2006, 31, 805-816.	2.2	30

#	Article	IF	Citations
37	Comparison of neuroplastin and synaptic marker protein expression in acute and cultured organotypic hippocampal slices from rat. Developmental Brain Research, 2004, 150, 1-7.	1.7	25
38	Potent depression of stimulus evoked field potential responses in the medial entorhinal cortex by serotonin. British Journal of Pharmacology, 1999, 128, 248-254.	5.4	24
39	Essential Tremor â€“ A Cerebellar Driven Disorder?. Neuroscience, 2021, 462, 262-273.	2.3	24
40	Serotonin Reduces Polysynaptic Inhibition via 5-HT1A Receptors in the Superficial Entorhinal Cortex. Journal of Neurophysiology, 1998, 80, 1116-1121.	1.8	21
41	Are Type 1 metabotropic glutamate receptors a viable therapeutic target for the treatment of cerebellar ataxia?. Journal of Physiology, 2016, 594, 4643-4652.	2.9	19
42	Transient reversal of the sodium/calcium exchanger boosts presynaptic calcium and synaptic transmission at a cerebellar synapse. Journal of Neurophysiology, 2013, 109, 1669-1680.	1.8	17
43	Chimeric rabies SADB19-VSVg-pseudotyped lentiviral vectors mediate long-range retrograde transduction from the mouse spinal cord. Gene Therapy, 2015, 22, 357-364.	4.5	16
44	RNA-Sequencing Analysis Reveals a Regulatory Role for Transcription Factor Fezf2 in the Mature Motor Cortex. Frontiers in Molecular Neuroscience, 2017, 10, 283.	2.9	16
45	Validation of optical voltage reporting by the genetically encoded voltage indicator VSFP-Butterfly from cortical layer 2/3 pyramidal neurons in mouse brain slices. Physiological Reports, 2015, 3, e12468.	1.7	15
46	Functional Integration of Calcium Regulatory Mechanisms at Purkinje Neuron Synapses. Cerebellum, 2012, 11, 640-650.	2.5	13
47	Functional contributions of the plasma membrane calcium ATPase and the sodiumâ€“calcium exchanger at mouse parallel fibre to Purkinje neuron synapses. Pflugers Archiv European Journal of Physiology, 2013, 465, 319-331.	2.8	13
48	Functional contributions of glutamate transporters at the parallel fibre to Purkinje neuron synapseâ€“relevance for the progression of cerebellar ataxia. Cerebellum and Ataxias, 2014, 1, 3.	1.9	12
49	Motor and Cerebellar Architectural Abnormalities during the Early Progression of Ataxia in a Mouse Model of SCA1 and How Early Prevention Leads to a Better Outcome Later in Life. Frontiers in Cellular Neuroscience, 2017, 11, 292.	3.7	12
50	Contribution of plasma membrane Ca²⁺ATPase to cerebellar synapse function. World Journal of Biological Chemistry, 2010, 1, 95.	4.3	11
51	Enhanced Synaptic Inhibition in the Cerebellar Cortex of the Ataxic PMCA2â^'/â^' Knockout Mouse. Cerebellum, 2013, 12, 667-675.	2.5	9
52	Effects of serotonin on synaptic and intrinsic properties of rat subicular neurons in vitro. Brain Research, 1997, 773, 217-222.	2.2	8
53	The Contribution of the Sodium-Calcium Exchanger (NCX) and Plasma Membrane Ca2+ ATPase (PMCA) to Cerebellar Synapse Function. Advances in Experimental Medicine and Biology, 2013, 961, 251-263.	1.6	8
54	Transcriptome Profiling of Layer 5 Intratelencephalic Projection Neurons From the Mature Mouse Motor Cortex. Frontiers in Molecular Neuroscience, 2018, 11, 410.	2.9	8

#	Article	IF	Citations
55	Electrophysiology and morphology of a new type of cell within layer II of the rat lateral entorhinal cortex in vitro. Neuroscience Letters, 1995, 193, 149-152.	2.1	7
56	Chlormethiazole inhibits epileptiform activity by potentiating GABAA receptor function. Brain Research, 2000, 884, 31-34.	2.2	7
57	Cholinergic modulation of sensory processing in awake mouse cortex. Scientific Reports, 2021, 11, 17525.	3.3	7
58	A novel kinetic method for the evaluation of biomass supports of surface area inestimable directly, using a uranium-accumulatingCitrobacter sp. immobilized within a plug flow reactor. Biotechnology Letters, 1988, 2, 265-270.	0.5	5
59	Reduced expression of the â€œfastâ€•calcium transporter PMCA2a during homeostatic plasticity. Molecular and Cellular Neurosciences, 2009, 41, 364-372.	2.2	5
60	An On-Demand Drug Delivery System for Control of Epileptiform Seizures. Pharmaceutics, 2022, 14, 468.	4.5	5
61	Assessment of the Contribution of the Plasma Membrane Calcium ATPase, PMCA, Calcium Transporter to Synapse Function Using Patch Clamp Electrophysiology and Fast Calcium Imaging. Methods in Molecular Biology, 2010, 637, 343-360.	0.9	3
62	Modulation of Î³-aminobutyric acid responses in the rat optic nerve. European Journal of Pharmacology, 2000, 401, 339-342.	3.5	1
63	Survival strategies for mouse cerebellar Purkinje neurons lacking PMCA2. Neuroscience Letters, 2018, 663, 25-28.	2.1	0
64	Combined Immunochemistry and Live Imaging of Fluorescent Protein Expressing Neurons in Mouse Brain. Neuromethods, 2015, , 357-373.	0.3	0