Jakub WÅ, odarczyk

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/1601730/publications.pdf

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65 papers 3,190 citations

28 h-index 52 g-index

70 all docs 70 docs citations

70 times ranked

4982 citing authors

#	Article	IF	CITATIONS
1	CTCF-Mediated Human 3D Genome Architecture Reveals Chromatin Topology for Transcription. Cell, 2015, 163, 1611-1627.	28.9	881
2	Influence of matrix metalloproteinase MMP-9 on dendritic spine morphology. Journal of Cell Science, 2011, 124, 3369-3380.	2.0	200
3	Analysis of FRET Signals in the Presence of Free Donors and Acceptors. Biophysical Journal, 2008, 94, 986-1000.	0.5	130
4	Cellular Senescence in Brain Aging. Frontiers in Aging Neuroscience, 2021, 13, 646924.	3.4	129
5	Extracellular matrix molecules, their receptors, and secreted proteases in synaptic plasticity. Developmental Neurobiology, 2011, 71, 1040-1053.	3.0	115
6	MMP9: A novel function in synaptic plasticity. International Journal of Biochemistry and Cell Biology, 2012, 44, 709-713.	2.8	103
7	Attenuated palmitoylation of serotonin receptor 5-HT1A affects receptor function and contributes to depression-like behaviors. Nature Communications, 2019, 10, 3924.	12.8	100
8	Interpretation of Fluorescence Decays using a Power-like Model. Biophysical Journal, 2003, 85, 589-598.	0.5	97
9	Synaptic Remodeling Depends on Signaling between Serotonin Receptors and the Extracellular Matrix. Cell Reports, 2017, 19, 1767-1782.	6.4	92
10	Synaptically Released Matrix Metalloproteinase Activity in Control of Structural Plasticity and the Cell Surface Distribution of GluA1-AMPA Receptors. PLoS ONE, 2014, 9, e98274.	2.5	76
11	Sampling issues in quantitative analysis of dendritic spines morphology. BMC Bioinformatics, 2012, 13, 213.	2.6	66
12	Matrix metalloproteinase-9 involvement in the structural plasticity of dendritic spines. Frontiers in Neuroanatomy, 2014, 8, 68.	1.7	66
13	Matrix Metalloproteinases Regulate the Formation of Dendritic Spine Head Protrusions during Chemically Induced Long-Term Potentiation. PLoS ONE, 2013, 8, e63314.	2.5	63
14	Novel Higher-Order Epigenetic Regulation of the <i>Bdnf </i> Gene upon Seizures. Journal of Neuroscience, 2013, 33, 2507-2511.	3.6	62
15	Tunneling nanotube-mediated intercellular vesicle and protein transfer in the stroma-provided imatinib resistance in chronic myeloid leukemia cells. Cell Death and Disease, 2019, 10, 817.	6.3	59
16	CD44: a novel synaptic cell adhesion molecule regulating structural and functional plasticity of dendritic spines. Molecular Biology of the Cell, 2016, 27, 4055-4066.	2.1	58
17	Transient ECM protease activity promotes synaptic plasticity. Scientific Reports, 2016, 6, 27757.	3.3	53
18	Stimulation- and palmitoylation-dependent changes in oligomeric conformation of serotonin 5-HT1A receptorsi. Biochimica Et Biophysica Acta - Molecular Cell Research, 2008, 1783, 1503-1516.	4.1	48

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19	Insights Into Protein S-Palmitoylation in Synaptic Plasticity and Neurological Disorders: Potential and Limitations of Methods for Detection and Analysis. Frontiers in Molecular Neuroscience, 2018, 11, 175.	2.9	48
20	Signal/Noise Analysis of FRET-Based Sensors. Biophysical Journal, 2010, 99, 2344-2354.	0.5	46
21	Genetically encoded FRET-based biosensor for imaging MMP-9 activity. Biomaterials, 2014, 35, 1402-1410.	11.4	42
22	CD44 regulates dendrite morphogenesis through Src tyrosine kinase-dependent positioning of the Golgi apparatus. Journal of Cell Science, 2014, 127, 5038-51.	2.0	41
23	Constitutive Gs-mediated, but not G12-mediated, activity of the 5-hydroxytryptamine 5-HT7(a) receptor is modulated by the palmitoylation of its C-terminal domain. Biochimica Et Biophysica Acta - Molecular Cell Research, 2009, 1793, 1646-1655.	4.1	40
24	Stress-induced Changes in the S-palmitoylation and S-nitrosylation of Synaptic Proteins*[S]. Molecular and Cellular Proteomics, 2019, 18, 1916-1938.	3.8	39
25	Prophylactic Ketamine Treatment Promotes Resilience to Chronic Stress and Accelerates Recovery: Correlation with Changes in Synaptic Plasticity in the CA3 Subregion of the Hippocampus. International Journal of Molecular Sciences, 2019, 20, 1726.	4.1	36
26	Combination of dasatinib and quercetin improves cognitive abilities in aged male Wistar rats, alleviates inflammation and changes hippocampal synaptic plasticity and histone H3 methylation profile. Aging, 2022, 14, 572-595.	3.1	34
27	Microglia Depletion-Induced Remodeling of Extracellular Matrix and Excitatory Synapses in the Hippocampus of Adult Mice. Cells, 2021, 10, 1862.	4.1	32
28	CD44 is expressed in non-myelinating Schwann cells of the adult rat, and may play a role in neurodegeneration-induced glial plasticity at the neuromuscular junction. Neurobiology of Disease, 2009, 34, 245-258.	4.4	31
29	Specific oligomerization of the 5-HT1A receptor in the plasma membrane. Glycoconjugate Journal, 2009, 26, 749-756.	2.7	30
30	Fine-structural distribution of MMP-2 and MMP-9 activities in the rat skeletal muscle upon training: a study by high-resolution in situ zymography. Histochemistry and Cell Biology, 2012, 138, 75-87.	1.7	30
31	Quantification of Dendritic Spines Remodeling under Physiological Stimuli and in Pathological Conditions. International Journal of Molecular Sciences, 2021, 22, 4053.	4.1	28
32	Synaptic Potentiation at Basal and Apical Dendrites of Hippocampal Pyramidal Neurons Involves Activation of a Distinct Set of Extracellular and Intracellular Molecular Cues. Cerebral Cortex, 2019, 29, 283-304.	2.9	27
33	Quantitative 3-D morphometric analysis of individual dendritic spines. Scientific Reports, 2018, 8, 3545.	3.3	26
34	Serotonin 5-HT4 receptor boosts functional maturation of dendritic spines via RhoA-dependent control of F-actin. Communications Biology, 2020, 3, 76.	4.4	26
35	Involvement of cellular metabolism in age-related LTP modifications in rat hippocampal slices. Oncotarget, 2015, 6, 14065-14081.	1.8	25
36	2dSpAn: semiautomated 2-d segmentation, classification and analysis of hippocampal dendritic spine plasticity. Bioinformatics, 2016, 32, 2490-2498.	4.1	24

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37	Dystroglycan controls dendritic morphogenesis of hippocampal neurons in vitro. Frontiers in Cellular Neuroscience, 2015, 9, 199.	3.7	21
38	Identification of the tautomeric form of formycin A in its complex with Escherichia coli purine nucleoside phosphorylase based on the effect of enzyme–ligand binding on fluorescence and phosphorescence. European Biophysics Journal, 2004, 33, 377-385.	2.2	18
39	Disrupted ATP synthase activity and mitochondrial hyperpolarisation-dependent oxidative stress is associated with p66Shc phosphorylation in fibroblasts of NARP patients. International Journal of Biochemistry and Cell Biology, 2013, 45, 141-150.	2.8	18
40	Activation of the 5-HT7 receptor and MMP-9 signaling module in the hippocampal CA1 region is necessary for the development of depressive-like behavior. Cell Reports, 2022, 38, 110532.	6.4	18
41	Matrix Metalloprotease 3 Activity Supports Hippocampal EPSP-to-Spike Plasticity Following Patterned Neuronal Activity via the Regulation of NMDAR Function and Calcium Flux. Molecular Neurobiology, 2017, 54, 804-816.	4.0	15
42	MMP-9 Signaling Pathways That Engage Rho GTPases in Brain Plasticity. Cells, 2021, 10, 166.	4.1	12
43	Arhgef5 Binds $\hat{l}\pm$ -Dystrobrevin 1 and Regulates Neuromuscular Junction Integrity. Frontiers in Molecular Neuroscience, 2020, 13, 104.	2.9	10
44	3dSpAn: An interactive software for 3D segmentation and analysis of dendritic spines. Neuroinformatics, 2022, 20, 679-698.	2.8	10
45	A new approach to interpretation of heterogeneity of fluorescence decay: Effect of induced tautomeric shift and enzyme→ligand fluorescence resonance energy transfer. Biophysical Chemistry, 2006, 123, 146-153.	2.8	9
46	DHHC7-mediated palmitoylation of the accessory protein barttin critically regulates the functions of CIC-K chloride channels. Journal of Biological Chemistry, 2020, 295, 5970-5983.	3.4	9
47	PSD-95 Serine 73 phosphorylation is not required for induction of NMDA-LTD. Scientific Reports, 2020, 10, 2054.	3.3	8
48	S-Palmitoylation of Synaptic Proteins as a Novel Mechanism Underlying Sex-Dependent Differences in Neuronal Plasticity. International Journal of Molecular Sciences, 2021, 22, 6253.	4.1	7
49	Kinetics of triplet excitation transport in disordered organic solids. Chemical Physics, 2004, 297, 139-142.	1.9	6
50	Multi-parametric imaging of murine brain using spectral and time domain optical coherence tomography. Journal of Biomedical Optics, 2012, 17, 101515.	2.6	5
51	Current microscopic methods for the neural ECM analysis. Progress in Brain Research, 2014, 214, 287-312.	1.4	4
52	Interpretation of intramolecular stacking effect on the fluorescence intensity decay of 3-methylbenzimidazolyl(5′-5′)guanosine dinucleotides using a model of lifetime distribution. European Biophysics Journal, 2006, 35, 424-430.	2.2	2
53	Analysis of proton exchange kinetics with time-dependent exchange rate. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2010, 1804, 891-898.	2.3	2
54	RFCM-PALM: In-Silico Prediction of S-Palmitoylation Sites in the Synaptic Proteins for Male/Female Mouse Data. International Journal of Molecular Sciences, 2021, 22, 9901.	4.1	2

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55	The cell adhesion protein dystroglycan affects the structural remodeling of dendritic spines. Scientific Reports, 2022, 12, 2506.	3.3	2
56	Contemporary Problems in Quantitative Image Analysis in Structural Neuronal Plasticity. , 2014, , 159-175.		1
57	On the origin of non-exponential fluorescence decays in enzyme-ligand complex. , 2004, 5330, 92.		O
58	A new approach to interpretation of heterogeneity of fluorescence decay in complex biological systems., 2005, 5862, 205.		0
59	A New Approach to Interpretation of Heterogeneity of Fluorescence Decay in Complex Biological Systems. , 2005, , ThE7.		O
60	Interpretation of fluorescence decay kinetics in 3-methylbenzimidazolyl($5\hat{a}\in^2$ - $5\hat{a}\in^2$)guanosine dinucleotides: exponential dependence on the number of phosphates in the polyphosphate bridge. European Biophysics Journal, 2007, 36, 253-259.	2.2	0
61	Cortical blood flow imaging of mouse stroke model by high-speed Spectral OCT. Proceedings of SPIE, 2011, , .	0.8	0
62	Volumetric Doppler imaging of small animal brain using spectral and time domain optical coherence tomography. Proceedings of SPIE, $2011, \ldots$	0.8	0
63	Influence of matrix metalloproteinase MMP-9 on dendritic spine morphology. Development (Cambridge), 2011, 138, e2008-e2008.	2.5	O
64	Segmentation and assessment of structural plasticity of hippocampal dendritic spines from 3D confocal light microscopy. , 2018 , , .		0
65	Optical coherence tomography reveals heterogeneity of the brain tissue and vasculature in the ischemic region after photothrombotic stroke in mice Acta Neurobiologiae Experimentalis, 2022, 82, 106-119.	0.7	0