

Masaki Fukata

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/96216/publications.pdf>

Version: 2024-02-01

100
papers

10,631
citations

28272

55
h-index

40976

93
g-index

105
all docs

105
docs citations

105
times ranked

10283
citing authors

#	ARTICLE	IF	CITATIONS
1	Rac1 and Cdc42 Capture Microtubules through IQGAP1 and CLIP-170. <i>Cell</i> , 2002, 109, 873-885.	28.9	537
2	Protein palmitoylation in neuronal development and synaptic plasticity. <i>Nature Reviews Neuroscience</i> , 2010, 11, 161-175.	10.2	532
3	Identification of PSD-95 Palmitoylating Enzymes. <i>Neuron</i> , 2004, 44, 987-996.	8.1	483
4	Role of IQGAP1, a Target of the Small GTPases Cdc42 and Rac1, in Regulation of E-Cadherin-Mediated Cell-Cell Adhesion. <i>J Cell Biol</i> , 1998, 281, 832-835.		454
5	Roles of Rho-family GTPases in cell polarisation and directional migration. <i>Current Opinion in Cell Biology</i> , 2003, 15, 590-597.	5.4	421
6	Interaction with IQGAP1 Links APC to Rac1, Cdc42, and Actin Filaments during Cell Polarization and Migration. <i>Developmental Cell</i> , 2004, 7, 871-883.	7.0	421
7	Rho-family GTPases in cadherin-mediated cell-cell adhesion. <i>Nature Reviews Molecular Cell Biology</i> , 2001, 2, 887-897.	37.0	394
8	Epilepsy-Related Ligand/Receptor Complex LGI1 and ADAM22 Regulate Synaptic Transmission. <i>Science</i> , 2006, 313, 1792-1795.	12.6	352
9	Identification of IQGAP as a Putative Target for the Small GTPases, Cdc42 and Rac1. <i>Journal of Biological Chemistry</i> , 1996, 271, 23363-23367.	3.4	290
10	Autoantibodies to Epilepsy-Related LGI1 in Limbic Encephalitis Neutralize LGI1-ADAM22 Interaction and Reduce Synaptic AMPA Receptors. <i>Journal of Neuroscience</i> , 2013, 33, 18161-18174.	3.6	288
11	Disruption of LGI1-linked synaptic complex causes abnormal synaptic transmission and epilepsy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 3799-3804.	7.1	287
12	Local palmitoylation cycles define activity-regulated postsynaptic subdomains. <i>Journal of Cell Biology</i> , 2013, 202, 145-161.	5.2	239
13	Differential Activity-Dependent Secretion of Brain-Derived Neurotrophic Factor from Axon and Dendrite. <i>Journal of Neuroscience</i> , 2009, 29, 14185-14198.	3.6	226
14	Dynamic Interaction of Stargazin-like TARPs with Cycling AMPA Receptors at Synapses. <i>Science</i> , 2004, 303, 1508-1511.	12.6	221
15	Cdc42 and Rac1 Regulate the Interaction of IQGAP1 with β -Catenin. <i>Journal of Biological Chemistry</i> , 1999, 274, 26044-26050.	3.4	205
16	p140Sra-1 (Specifically Rac1-associated Protein) Is a Novel Specific Target for Rac1 Small GTPase. <i>Journal of Biological Chemistry</i> , 1998, 273, 291-295.	3.4	203
17	Mobile DHHC palmitoylating enzyme mediates activity-sensitive synaptic targeting of PSD-95. <i>Journal of Cell Biology</i> , 2009, 186, 147-160.	5.2	194
18	Identification of PSD-95 Depalmitoylating Enzymes. <i>Journal of Neuroscience</i> , 2016, 36, 6431-6444.	3.6	189

#	ARTICLE	IF	CITATIONS
19	Regulation of Cross-linking of Actin Filament by IQGAP1, a Target for Cdc42. <i>Journal of Biological Chemistry</i> , 1997, 272, 29579-29583.	3.4	184
20	Regulation of cadherin-mediated cell-cell adhesion by the Rho family GTPases. <i>Current Opinion in Cell Biology</i> , 1999, 11, 591-596.	5.4	181
21	GODZ-Mediated Palmitoylation of GABA _A Receptors Is Required for Normal Assembly and Function of GABAergic Inhibitory Synapses. <i>Journal of Neuroscience</i> , 2006, 26, 12758-12768.	3.6	148
22	Identification of Golgi-localized acyl transferases that palmitoylate and regulate endothelial nitric oxide synthase. <i>Journal of Cell Biology</i> , 2006, 174, 369-377.	5.2	146
23	IQGAP3, a novel effector of Rac1 and Cdc42, regulates neurite outgrowth. <i>Journal of Cell Science</i> , 2007, 120, 567-577.	2.0	138
24	Alzheimer Disease A β Production in the Absence of S-Palmitoylation-dependent Targeting of BACE1 to Lipid Rafts. <i>Journal of Biological Chemistry</i> , 2009, 284, 3793-3803.	3.4	137
25	Identification of G Protein β Subunit-Palmitoylating Enzyme. <i>Molecular and Cellular Biology</i> , 2009, 29, 435-447.	2.3	127
26	Positive Role of IQGAP1, an Effector of Rac1, in Actin-Meshwork Formation at Sites of Cell-Cell Contact. <i>Molecular Biology of the Cell</i> , 2004, 15, 1065-1076.	2.1	122
27	Neurotransmitter release regulated by a MAL2-liprin- β presynaptic complex. <i>Journal of Cell Biology</i> , 2005, 170, 1127-1134.	5.2	116
28	Palmitoylation and Membrane Interactions of the Neuroprotective Chaperone Cysteine-string Protein. <i>Journal of Biological Chemistry</i> , 2008, 283, 25014-25026.	3.4	110
29	Phosphorylation of ERM proteins at filopodia induced by Cdc42. <i>Genes To Cells</i> , 2000, 5, 571-581.	1.2	108
30	Impaired Activation and Localization of LAT in Anergic T Cells as a Consequence of a Selective Palmitoylation Defect. <i>Immunity</i> , 2006, 24, 513-522.	14.3	108
31	Systematic screening for palmitoyl transferase activity of the DHHC protein family in mammalian cells. <i>Methods</i> , 2006, 40, 177-182.	3.8	108
32	Identification and Characterization of GABA _A Receptor Autoantibodies in Autoimmune Encephalitis. <i>Journal of Neuroscience</i> , 2014, 34, 8151-8163.	3.6	108
33	Molecular constituents of neuronal AMPA receptors. <i>Journal of Cell Biology</i> , 2005, 169, 399-404.	5.2	105
34	Structural basis for tubulin recognition by cytoplasmic linker protein 170 and its autoinhibition. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 10346-10351.	7.1	101
35	Regulation of Cell-Cell Adhesion of MDCK Cells by Cdc42 and Rac1 Small GTPases. <i>Biochemical and Biophysical Research Communications</i> , 1997, 240, 430-435.	2.1	98
36	Identification of the stef Gene That Encodes a Novel Guanine Nucleotide Exchange Factor Specific for Rac1. <i>Journal of Biological Chemistry</i> , 1999, 274, 17837-17844.	3.4	98

#	ARTICLE	IF	CITATIONS
37	Dynamic protein palmitoylation in cellular signaling. <i>Progress in Lipid Research</i> , 2009, 48, 117-127.	11.6	95
38	Dynamic Palmitoylation Targets MAP6 to the Axon to Promote Microtubule Stabilization during Neuronal Polarization. <i>Neuron</i> , 2017, 94, 809-825.e7.	8.1	94
39	LGI2 Truncation Causes a Remitting Focal Epilepsy in Dogs. <i>PLoS Genetics</i> , 2011, 7, e1002194.	3.5	88
40	Cell adhesion and Rho small GTPases. <i>Journal of Cell Science</i> , 1999, 112, 4491-4500.	2.0	88
41	Involvement of IQGAP1, an Effector of Rac1 and Cdc42 GTPases, in Cell-Cell Dissociation during Cell Scattering. <i>Molecular and Cellular Biology</i> , 2001, 21, 2165-2183.	2.3	87
42	Discovery of protein-palmitoylating enzymes. <i>Pflügers Archiv European Journal of Physiology</i> , 2008, 456, 1199-1206.	2.8	84
43	Palmitoylation Regulates Epidermal Homeostasis and Hair Follicle Differentiation. <i>PLoS Genetics</i> , 2009, 5, e1000748.	3.5	81
44	2-Bromopalmitate Analogues as Activity-Based Probes To Explore Palmitoyl Acyltransferases. <i>Journal of the American Chemical Society</i> , 2013, 135, 7082-7085.	13.7	81
45	The LGI1-ADAM22 protein complex directs synapse maturation through regulation of PSD-95 function. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, E4129-37.	7.1	80
46	Phosphatidylinositol 4-Kinase III β Is Palmitoylated by Golgi-localized Palmitoyltransferases in Cholesterol-dependent Manner. <i>Journal of Biological Chemistry</i> , 2012, 287, 21856-21865.	3.4	77
47	The Hydrophobic Cysteine-rich Domain of SNAP25 Couples with Downstream Residues to Mediate Membrane Interactions and Recognition by DHHC Palmitoyl Transferases. <i>Molecular Biology of the Cell</i> , 2009, 20, 1845-1854.	2.1	75
48	ABHD10 is an S-depalmitoylase affecting redox homeostasis through peroxiredoxin-5. <i>Nature Chemical Biology</i> , 2019, 15, 1232-1240.	8.0	72
49	Human Cerebrospinal Fluid Monoclonal LGI1 Autoantibodies Increase Neuronal Excitability. <i>Annals of Neurology</i> , 2020, 87, 405-418.	5.3	72
50	BAI1 regulates spatial learning and synaptic plasticity in the hippocampus. <i>Journal of Clinical Investigation</i> , 2015, 125, 1497-1508.	8.2	71
51	Epilepsy and synaptic proteins. <i>Current Opinion in Neurobiology</i> , 2017, 45, 1-8.	4.2	68
52	Cdc42, Rac1, and Their Effector IQGAP1 as Molecular Switches for Cadherin-Mediated Cell-Cell Adhesion. <i>Biochemical and Biophysical Research Communications</i> , 1999, 262, 1-6.	2.1	65
53	Secreted Metalloproteinase ADAMTS-3 Inactivates Reelin. <i>Journal of Neuroscience</i> , 2017, 37, 3181-3191.	3.6	65
54	Fibroblast Growth Factor-Regulated Palmitoylation of the Neural Cell Adhesion Molecule Determines Neuronal Morphogenesis. <i>Journal of Neuroscience</i> , 2008, 28, 8897-8907.	3.6	63

#	ARTICLE	IF	CITATIONS
55	Chemical corrector treatment ameliorates increased seizure susceptibility in a mouse model of familial epilepsy. <i>Nature Medicine</i> , 2015, 21, 19-26.	30.7	63
56	Identification of a Novel β -Catenin-Interacting Protein. <i>Biochemical and Biophysical Research Communications</i> , 2000, 273, 712-717.	2.1	62
57	Structural basis of epilepsy-related ligand-receptor complex LGI1-ADAM22. <i>Nature Communications</i> , 2018, 9, 1546.	12.8	54
58	Local Palmitoylation Cycles and Specialized Membrane Domain Organization. <i>Current Topics in Membranes</i> , 2016, 77, 97-141.	0.9	52
59	GM1-ganglioside-induced β assembly on synaptic membranes of cultured neurons. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2007, 1768, 1128-1137.	2.6	51
60	Ndel1 palmitoylation: a new mean to regulate cytoplasmic dynein activity. <i>EMBO Journal</i> , 2010, 29, 107-119.	7.8	49
61	LGI1-ADAM22-MAGUK configures transsynaptic nanoalignment for synaptic transmission and epilepsy prevention. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	49
62	Renal defects associated with improper polarization of the CRB and DLG polarity complexes in MALS-3 knockout mice. <i>Journal of Cell Biology</i> , 2007, 179, 151-164.	5.2	42
63	ELMOD2 is anchored to lipid droplets by palmitoylation and regulates adipocyte triglyceride lipase recruitment. <i>Molecular Biology of the Cell</i> , 2015, 26, 2333-2342.	2.1	40
64	Forelimb movements evoked by optogenetic stimulation of the macaque motor cortex. <i>Nature Communications</i> , 2020, 11, 3253.	12.8	36
65	Synaptic Plasticity Regulated by Protein-Protein Interactions and Posttranslational Modifications. <i>International Review of Cell and Molecular Biology</i> , 2012, 297, 1-43.	3.2	35
66	In Silico Screening for Palmitoyl Substrates Reveals a Role for DHHC1/3/10 (zDHHC1/3/11)-mediated Neurochondrin Palmitoylation in Its Targeting to Rab5-positive Endosomes. <i>Journal of Biological Chemistry</i> , 2013, 288, 19816-19829.	3.4	35
67	The LGI1-ADAM22 protein complex in synaptic transmission and synaptic disorders. <i>Neuroscience Research</i> , 2017, 116, 39-45.	1.9	34
68	Dysfunctional ADAM22 implicated in progressive encephalopathy with cortical atrophy and epilepsy. <i>Neurology: Genetics</i> , 2016, 2, e46.	1.9	33
69	Functional phylogenetic analysis of LGI proteins identifies an interaction motif crucial for myelination. <i>Development (Cambridge)</i> , 2014, 141, 1749-1756.	2.5	30
70	Neurobiology of autoimmune encephalitis. <i>Current Opinion in Neurobiology</i> , 2018, 48, 1-8.	4.2	30
71	Subcellular Golgi localization of stathmin family proteins is promoted by a specific set of DHHC palmitoyl transferases. <i>Molecular Biology of the Cell</i> , 2011, 22, 1930-1942.	2.1	29
72	Targeting CCR5 trafficking to inhibit HIV-1 infection. <i>Science Advances</i> , 2019, 5, eaax0821.	10.3	26

#	ARTICLE	IF	CITATIONS
73	Dynamic palmitoylation controls the microdomain localization of the DKK1 receptors CKAP4 and LRP6. <i>Science Signaling</i> , 2019, 12, .	3.6	26
74	Neuronal major histocompatibility complex class I molecules are implicated in the generation of asymmetries in hippocampal circuitry. <i>Journal of Physiology</i> , 2013, 591, 4777-4791.	2.9	23
75	Astrocyte-mediated infantile-onset leukoencephalopathy mouse model. <i>Glia</i> , 2017, 65, 150-168.	4.9	20
76	Trans-synaptic LGI1-ADAM22-MAGUK in AMPA and NMDA receptor regulation. <i>Neuropharmacology</i> , 2021, 194, 108628.	4.1	20
77	Canonical versus non-canonical transsynaptic signaling of neuroligin 3 tunes development of sociality in mice. <i>Nature Communications</i> , 2021, 12, 1848.	12.8	19
78	Encephalitis patient-derived monoclonal GABAA receptor antibodies cause epileptic seizures. <i>Journal of Experimental Medicine</i> , 2021, 218, .	8.5	19
79	The extracellular domain of angulin-1 and palmitoylation of its cytoplasmic region are required for angulin-1 assembly at tricellular contacts. <i>Journal of Biological Chemistry</i> , 2020, 295, 4289-4302.	3.4	16
80	Systematic Screening of Depalmitoylating Enzymes and Evaluation of Their Activities by the Acyl-PEGyl Exchange Gel-Shift (APEGS) Assay. <i>Methods in Molecular Biology</i> , 2019, 2009, 83-98.	0.9	15
81	A novel red fluorescence dopamine biosensor selectively detects dopamine in the presence of norepinephrine in vitro. <i>Molecular Brain</i> , 2021, 14, 173.	2.6	15
82	Long-term clinical follow-up of a patient with non-paraneoplastic cerebellar ataxia associated with anti-mGluR1 autoantibodies. <i>Journal of Neuroimmunology</i> , 2018, 319, 63-67.	2.3	13
83	Leucine-rich glioma inactivated 1 (Lgi1), an epilepsy-related secreted protein, has a nuclear localization signal and localizes to both the cytoplasm and the nucleus of the caudal ganglionic eminence neurons. <i>European Journal of Neuroscience</i> , 2012, 36, 2284-2292.	2.6	12
84	Effects of Rho Family GTPases on Cell-Cell Adhesion. , 2002, 189, 121-128.		10
85	Non-Microtubular Localizations of Microtubule-Associated Protein 6 (MAP6). <i>PLoS ONE</i> , 2014, 9, e114905.	2.5	10
86	Protein Palmitoylation by DHHC Protein Family. <i>Frontiers in Neuroscience</i> , 2006, , 83-89.	0.0	10
87	14-3-3 proteins stabilize LGI1-ADAM22 levels to regulate seizure thresholds in mice. <i>Cell Reports</i> , 2021, 37, 110107.	6.4	10
88	Postsynaptic nanodomains generated by local palmitoylation cycles. <i>Biochemical Society Transactions</i> , 2015, 43, 199-204.	3.4	9
89	Deleted in colorectal cancer (netrin-1 receptor) antibodies and limbic encephalitis in a cat with hippocampal necrosis. <i>Journal of Veterinary Internal Medicine</i> , 2019, 33, 1440-1445.	1.6	9
90	MAGUKs are essential, but redundant, in long-term potentiation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	8

#	ARTICLE	IF	CITATIONS
91	Biallelic <i>ADAM22</i> pathogenic variants cause progressive encephalopathy and infantile-onset refractory epilepsy. <i>Brain</i> , 2022, 145, 2301-2312.	7.6	8
92	Palmitoylation of the small GTPase Cdc42 by DHH5 modulates spine formation and gene transcription. <i>Journal of Biological Chemistry</i> , 2022, 298, 102048.	3.4	8
93	Coupling of a voltage-gated Ca ²⁺ channel homologue with a plasma membrane H ⁺ -ATPase in yeast. <i>Genes To Cells</i> , 2017, 22, 94-104.	1.2	5
94	In situ screening for postsynaptic cell adhesion molecules during synapse formation. <i>Journal of Biochemistry</i> , 2017, 162, 295-302.	1.7	2
95	Insight into the function of a unique voltage-sensor protein (TMEM266) and its short form in mouse cerebellum. <i>Biochemical Journal</i> , 2022, , .	3.7	1
96	2P021 Structural and functional studies of CLIP-170(Proteins-structure and structure-function) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 54	0.1	0
97	Acyl-PEGyl exchange gel-shift (APEGS) assay for palmitoylation quantification. <i>Denki Eido</i> , 2021, 65, 41-45.	0.0	0
98	Local palmitoylation cycles define activity-regulated postsynaptic subdomains. <i>Journal of General Physiology</i> , 2013, 142, 1422OIA19.	1.9	0
99	Functional phylogenetic analysis of LGI proteins identifies an interaction motif crucial for myelination. <i>Journal of Cell Science</i> , 2014, 127, e1-e1.	2.0	0
100	DHHC Proteins. , 2018, , 1367-1372.		0