Masaki Fukata

List of Publications by Year in Descending Order

99 papers	8,799 citations	51 h-index	93 g-index
105 ext. papers	9,821 ext. citations	9.4 avg, IF	5.79 L-index

#	Paper	IF	Citations
99	Palmitoylation of the small GTPase Cdc42 by DHHC5 modulates spine formation and gene transcription. *Journal of Biological Chemistry*, **2022**, 102048	5.4	1
98	Canonical versus non-canonical transsynaptic signaling of neuroligin 3 tunes development of sociality in mice. *Nature Communications*, **2021**, 12, 1848	17.4	4
97	Acyl-PEGyl exchange gel-shift (APEGS) assay for palmitoylation quantification **2021**, 65, 41-45		
96	MAGUKs are essential, but redundant, in long-term potentiation. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	1
95	Trans-synaptic LGI1-ADAM22-MAGUK in AMPA and NMDA receptor regulation. *Neuropharmacology*, **2021**, 194, 108628	5.5	3
94	LGI1-ADAM22-MAGUK configures transsynaptic nanoalignment for synaptic transmission and epilepsy prevention. *Proceedings of the National Academy of Sciences of the United States of America* , **2021**, 118,	11.5	16
93	A novel red fluorescence dopamine biosensor selectively detects dopamine in the presence of norepinephrine in vitro. *Molecular Brain*, **2021**, 14, 173	4.5	1
92	14-3-3 proteins stabilize LGI1-ADAM22 levels to regulate seizure thresholds in mice.. *Cell Reports*, **2021**, 37, 110107	10.6	0
91	Encephalitis patient-derived monoclonal GABAA receptor antibodies cause epileptic seizures. *Journal of Experimental Medicine*, **2021**, 218,	16.6	3
90	Forelimb movements evoked by optogenetic stimulation of the macaque motor cortex. *Nature Communications*, **2020**, 11, 3253	17.4	14
89	The extracellular domain of angulin-1 and palmitoylation of its cytoplasmic region are required for angulin-1 assembly at tricellular contacts. *Journal of Biological Chemistry*, **2020**, 295, 4289-4302	5.4	8
88	Human Cerebrospinal Fluid Monoclonal LGI1 Autoantibodies Increase Neuronal Excitability. *Annals of Neurology*, **2020**, 87, 405-418	9.4	32
87	Systematic Screening of Depalmitoylating Enzymes and Evaluation of Their Activities by the Acyl-PEGyl Exchange Gel-Shift (APEGS) Assay. *Methods in Molecular Biology*, **2019**, 2009, 83-98	1.4	7
86	Deleted in colorectal cancer (netrin-1 receptor) antibodies and limbic encephalitis in a cat with hippocampal necrosis. *Journal of Veterinary Internal Medicine*, **2019**, 33, 1440-1445	3.1	6
85	Targeting CCR5 trafficking to inhibit HIV-1 infection. *Science Advances*, **2019**, 5, eaax0821	14.3	13
84	Dynamic palmitoylation controls the microdomain localization of the DKK1 receptors CKAP4 and LRP6. *Science Signaling*, **2019**, 12,	8.8	13
83	ABHD10 is an S-depalmitoylase affecting redox homeostasis through peroxiredoxin-5. *Nature Chemical Biology*, **2019**, 15, 1232-1240	11.7	36

82	Structural basis of epilepsy-related ligand-receptor complex LGI1-ADAM22. *Nature Communications*, **2018**, 9, 1546	17.4	27
81	Long-term clinical follow-up of a patient with non-paraneoplastic cerebellar ataxia associated with anti-mGluR1 autoantibodies. *Journal of Neuroimmunology*, **2018**, 319, 63-67	3.5	5
80	Neurobiology of autoimmune encephalitis. *Current Opinion in Neurobiology*, **2018**, 48, 1-8	7.6	22
79	Epilepsy and synaptic proteins. *Current Opinion in Neurobiology*, **2017**, 45, 1-8	7.6	46
78	Secreted Metalloproteinase ADAMTS-3 Inactivates Reelin. *Journal of Neuroscience*, **2017**, 37, 3181-3191	6.6	36
77	In situ screening for postsynaptic cell adhesion molecules during synapse formation. *Journal of Biochemistry*, **2017**, 162, 295-302	3.1	2
76	Dynamic Palmitoylation Targets MAP6 to the Axon to Promote Microtubule Stabilization during Neuronal Polarization. *Neuron*, **2017**, 94, 809-825.e7	13.9	60
75	Coupling of a voltage-gated Ca channel homologue with a plasma membrane H -ATPase in yeast. *Genes To Cells*, **2017**, 22, 94-104	2.3	4
74	Astrocyte-mediated infantile-onset leukoencephalopathy mouse model. *Glia*, **2017**, 65, 150-168	9	14
73	The LGI1-ADAM22 protein complex in synaptic transmission and synaptic disorders. *Neuroscience Research*, **2017**, 116, 39-45	2.9	23
72	Local Palmitoylation Cycles and Specialized Membrane Domain Organization. *Current Topics in Membranes*, **2016**, 77, 97-141	2.2	37
71	Identification of PSD-95 Depalmitoylating Enzymes. *Journal of Neuroscience*, **2016**, 36, 6431-44	6.6	134
70	Dysfunctional ADAM22 implicated in progressive encephalopathy with cortical atrophy and epilepsy. *Neurology: Genetics*, **2016**, 2, e46	3.8	28
69	The LGI1-ADAM22 protein complex directs synapse maturation through regulation of PSD-95 function. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, E4129-37	11.5	55
68	ELMOD2 is anchored to lipid droplets by palmitoylation and regulates adipocyte triglyceride lipase recruitment. *Molecular Biology of the Cell*, **2015**, 26, 2333-42	3.5	34
67	BAI1 regulates spatial learning and synaptic plasticity in the hippocampus. *Journal of Clinical Investigation*, **2015**, 125, 1497-508	15.9	51
66	Chemical corrector treatment ameliorates increased seizure susceptibility in a mouse model of familial epilepsy. *Nature Medicine*, **2015**, 21, 19-26	50.5	48
65	Postsynaptic nanodomains generated by local palmitoylation cycles. *Biochemical Society Transactions*, **2015**, 43, 199-204	5.1	7

64	Identification and characterization of GABA(A) receptor autoantibodies in autoimmune encephalitis. *Journal of Neuroscience*, **2014**, 34, 8151-63	6.6	73
63	Non-microtubular localizations of microtubule-associated protein 6 (MAP6). *PLoS ONE*, **2014**, 9, e114905	3.7	7
62	Functional phylogenetic analysis of LGI proteins identifies an interaction motif crucial for myelination. *Development (Cambridge)*, **2014**, 141, 1749-56	6.6	24
61	Functional phylogenetic analysis of LGI proteins identifies an interaction motif crucial for myelination. *Journal of Cell Science*, **2014**, 127, e1-e1	5.3	
60	Local palmitoylation cycles define activity-regulated postsynaptic subdomains. *Journal of Cell Biology*, **2013**, 202, 145-61	7.3	187
59	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. *Journal of Biological Chemistry*, **2013**, 288, 19816-29	5.4	31
58	2-Bromopalmitate analogues as activity-based probes to explore palmitoyl acyltransferases. *Journal of the American Chemical Society*, **2013**, 135, 7082-5	16.4	68
57	Neuronal major histocompatibility complex class I molecules are implicated in the generation of asymmetries in hippocampal circuitry. *Journal of Physiology*, **2013**, 591, 4777-91	3.9	20
56	Autoantibodies to epilepsy-related LGI1 in limbic encephalitis neutralize LGI1-ADAM22 interaction and reduce synaptic AMPA receptors. *Journal of Neuroscience*, **2013**, 33, 18161-74	6.6	237
55	Local palmitoylation cycles define activity-regulated postsynaptic subdomains. *Journal of General Physiology*, **2013**, 142, 1422OIA19	3.4	
54	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. *European Journal of Neuroscience*, **2012**, 36, 2284-92	3.5	11
53	Synaptic plasticity regulated by protein-protein interactions and posttranslational modifications. *International Review of Cell and Molecular Biology*, **2012**, 297, 1-43	6	25
52	Phosphatidylinositol 4-kinase IIα is palmitoylated by Golgi-localized palmitoyltransferases in cholesterol-dependent manner. *Journal of Biological Chemistry*, **2012**, 287, 21856-65	5.4	59
51	Subcellular Golgi localization of stathmin family proteins is promoted by a specific set of DHHC palmitoyl transferases. *Molecular Biology of the Cell*, **2011**, 22, 1930-42	3.5	25
50	LGI2 truncation causes a remitting focal epilepsy in dogs. *PLoS Genetics*, **2011**, 7, e1002194	6	71
49	Protein palmitoylation in neuronal development and synaptic plasticity. *Nature Reviews Neuroscience*, **2010**, 11, 161-75	13.5	409
48	Ndel1 palmitoylation: a new mean to regulate cytoplasmic dynein activity. *EMBO Journal*, **2010**, 29, 107-19	9	43
47	Disruption of LGI1-linked synaptic complex causes abnormal synaptic transmission and epilepsy. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 3799-804	11.5	236

46	Palmitoylation regulates epidermal homeostasis and hair follicle differentiation. *PLoS Genetics*, **2009**, 5, e1000748	6	70
45	Identification of G protein alpha subunit-palmitoylating enzyme. *Molecular and Cellular Biology*, **2009**, 29, 435-47	4.8	100
44	Differential activity-dependent secretion of brain-derived neurotrophic factor from axon and dendrite. *Journal of Neuroscience*, **2009**, 29, 14185-98	6.6	195
43	Alzheimer disease Abeta production in the absence of S-palmitoylation-dependent targeting of BACE1 to lipid rafts. *Journal of Biological Chemistry*, **2009**, 284, 3793-803	5.4	119
42	The hydrophobic cysteine-rich domain of SNAP25 couples with downstream residues to mediate membrane interactions and recognition by DHHC palmitoyl transferases. *Molecular Biology of the Cell*, **2009**, 20, 1845-54	3.5	62
41	Mobile DHHC palmitoylating enzyme mediates activity-sensitive synaptic targeting of PSD-95. *Journal of Cell Biology*, **2009**, 186, 147-60	7.3	154
40	Dynamic protein palmitoylation in cellular signaling. *Progress in Lipid Research*, **2009**, 48, 117-27	14.3	84
39	Palmitoylation and membrane interactions of the neuroprotective chaperone cysteine-string protein. *Journal of Biological Chemistry*, **2008**, 283, 25014-26	5.4	89
38	Fibroblast growth factor-regulated palmitoylation of the neural cell adhesion molecule determines neuronal morphogenesis. *Journal of Neuroscience*, **2008**, 28, 8897-907	6.6	61
37	Discovery of protein-palmitoylating enzymes. *Pflugers Archiv European Journal of Physiology*, **2008**, 456, 1199-206	4.6	74
36	Structural basis for tubulin recognition by cytoplasmic linker protein 170 and its autoinhibition. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 10346-51	11.5	94
35	IQGAP3, a novel effector of Rac1 and Cdc42, regulates neurite outgrowth. *Journal of Cell Science*, **2007**, 120, 567-77	5.3	117
34	Renal defects associated with improper polarization of the CRB and DLG polarity complexes in MALS-3 knockout mice. *Journal of Cell Biology*, **2007**, 179, 151-64	7.3	38
33	2P021 Structural and functional studies of CLIP-170(Proteins-structure and structure-function relationship,Poster Presentations). *Seibutsu Butsuri*, **2007**, 47, S118	0	
32	GM1-ganglioside-induced Abeta assembly on synaptic membranes of cultured neurons. *Biochimica Et Biophysica Acta - Biomembranes*, **2007**, 1768, 1128-37	3.8	40
31	Identification of Golgi-localized acyl transferases that palmitoylate and regulate endothelial nitric oxide synthase. *Journal of Cell Biology*, **2006**, 174, 369-77	7.3	131
30	GODZ-mediated palmitoylation of GABA(A) receptors is required for normal assembly and function of GABAergic inhibitory synapses. *Journal of Neuroscience*, **2006**, 26, 12758-68	6.6	137
29	Epilepsy-related ligand/receptor complex LGI1 and ADAM22 regulate synaptic transmission. *Science*, **2006**, 313, 1792-5	33.3	292

28	Impaired activation and localization of LAT in anergic T cells as a consequence of a selective palmitoylation defect. *Immunity*, **2006**, 24, 513-22	32.3	96
27	Systematic screening for palmitoyl transferase activity of the DHHC protein family in mammalian cells. *Methods*, **2006**, 40, 177-82	4.6	90
26	Protein Palmitoylation by DHHC Protein Family. *Frontiers in Neuroscience*, **2006**, 83-89		6
25	Molecular constituents of neuronal AMPA receptors. *Journal of Cell Biology*, **2005**, 169, 399-404	7.3	97
24	Neurotransmitter release regulated by a MALS-liprin-alpha presynaptic complex. *Journal of Cell Biology*, **2005**, 170, 1127-34	7.3	106
23	Positive role of IQGAP1, an effector of Rac1, in actin-meshwork formation at sites of cell-cell contact. *Molecular Biology of the Cell*, **2004**, 15, 1065-76	3.5	118
22	Dynamic interaction of stargazin-like TARPs with cycling AMPA receptors at synapses. *Science*, **2004** , 303, 1508-11	33.3	202
21	Interaction with IQGAP1 links APC to Rac1, Cdc42, and actin filaments during cell polarization and migration. *Developmental Cell*, **2004**, 7, 871-83	10.2	381
20	Identification of PSD-95 palmitoylating enzymes. *Neuron*, **2004**, 44, 987-96	13.9	400
19	Roles of Rho-family GTPases in cell polarisation and directional migration. *Current Opinion in Cell Biology*, **2003**, 15, 590-7	9	392
18	Effects of Rho family GTPases on cell-cell adhesion. *Methods in Molecular Biology*, **2002**, 189, 121-8	1.4	10
17	Rac1 and Cdc42 capture microtubules through IQGAP1 and CLIP-170. *Cell*, **2002**, 109, 873-85	56.2	487
16	Rho-family GTPases in cadherin-mediated cell-cell adhesion. *Nature Reviews Molecular Cell Biology*, **2001**, 2, 887-97	48.7	357
15	Involvement of IQGAP1, an effector of Rac1 and Cdc42 GTPases, in cell-cell dissociation during cell scattering. *Molecular and Cellular Biology*, **2001**, 21, 2165-83	4.8	81
14	Phosphorylation of ERM proteins at filopodia induced by Cdc42. *Genes To Cells*, **2000**, 5, 571-81	2.3	95
13	Identification of a novel beta-catenin-interacting protein. *Biochemical and Biophysical Research Communications*, **2000**, 273, 712-7	3.4	55
12	Identification of the stef gene that encodes a novel guanine nucleotide exchange factor specific for Rac1. *Journal of Biological Chemistry*, **1999**, 274, 17837-44	5.4	93
11	Cdc42 and Rac1 regulate the interaction of IQGAP1 with beta-catenin. *Journal of Biological Chemistry*, **1999**, 274, 26044-50	5.4	175

10	Regulation of cadherin-mediated cell-cell adhesion by the Rho family GTPases. *Current Opinion in Cell Biology*, **1999**, 11, 591-6	9	166
9	Cdc42, Rac1, and their effector IQGAP1 as molecular switches for cadherin-mediated cell-cell adhesion. *Biochemical and Biophysical Research Communications*, **1999**, 262, 1-6	3.4	60
8	Cell adhesion and Rho small GTPases. *Journal of Cell Science*, **1999**, 112, 4491-4500	5.3	69
7	Role of IQGAP1, a target of the small GTPases Cdc42 and Rac1, in regulation of E-cadherin-mediated cell-cell adhesion. *Science*, **1998**, 281, 832-5	33.3	400
6	p140Sra-1 (specifically Rac1-associated protein) is a novel specific target for Rac1 small GTPase. *Journal of Biological Chemistry*, **1998**, 273, 291-5	5.4	181
5	Regulation of cross-linking of actin filament by IQGAP1, a target for Cdc42. *Journal of Biological Chemistry*, **1997**, 272, 29579-83	5.4	157
4	Regulation of cell-cell adhesion of MDCK cells by Cdc42 and Rac1 small GTPases. *Biochemical and Biophysical Research Communications*, **1997**, 240, 430-5	3.4	91
3	Identification of IQGAP as a putative target for the small GTPases, Cdc42 and Rac1. *Journal of Biological Chemistry*, **1996**, 271, 23363-7	5.4	254
2	A genetically encoded red fluorescence dopamine biosensor enables dual imaging of dopamine and norepinephrine		1
1	Encephalitis patient derived monoclonal GABAA receptor antibodies cause catatonia and epileptic seizures		4