Won Do Heo

List of Publications by Year
in descending order

Version: 2024-02-01

78 papers	7,531 citations	81900 39 h-index	71685 76 g-index
81 all docs	81 docs citations	81 times ranked	9778 citing authors

#	Article	IF	Citations
1	Opto-vTrap, an optogenetic trap for reversible inhibition of vesicular release, synaptic transmission, and behavior. Neuron, 2022, 110, 423-435.e4.	8.1	8
2	The emergence of molecular systems neuroscience. Molecular Brain, 2022, 15, 7.	2.6	7
3	Optogenetic Activation of Intracellular Nanobodies. Methods in Molecular Biology, 2022, 2446, 595-606.	0.9	0
4	Artificial Intelligenceâ€“Powered Spatial Analysis of Tumor-Infiltrating Lymphocytes as Complementary Biomarker for Immune Checkpoint Inhibition in Nonâ€“Small-Cell Lung Cancer. Journal of Clinical Oncology, 2022, 40, 1916-1928.	1.6	94
5	miR-4742â€“5p promotes invasiveness of gastric cancer via targeting Rab43: An inÂvitro study. Biochemical and Biophysical Research Communications, 2022, 613, 180-186.	2.1	3
6	Artificial intelligenceâ€“powered programmed death ligandÂ1 analyser reduces interobserver variation in tumour proportion score for nonâ€“small cell lung cancer with better prediction of immunotherapy response. European Journal of Cancer, 2022, 170, 17-26.	2.8	21
7	CCR5 closes the temporal window for memory linking. Nature, 2022, 606, 146-152.	27.8	40
8	Optogenetic Control of Membrane Trafficking Using Light-Activated Reversible Inhibition by Assembly Trap of Intracellular Membranes (IM-LARIAT). Methods in Molecular Biology, 2022, , 309-331.	0.9	1
9	Novel culture system via wirelessly controllable optical stimulation of the FGF signaling pathway for human and pig pluripotency. Biomaterials, 2021, 269, 120222.	11.4	5
10	Cerebellar 5HT-2A receptor mediates stress-induced onset of dystonia. Science Advances, 2021, 7, .	10.3	19
11	Hijacking of the host cell Golgi by Plasmodium berghei liver stage parasites. Journal of Cell Science, 2021, 134, .	2.0	15
12	Revisiting the Role of TGFÎ² Receptor Internalization for Smad Signaling: It is Not Required in Optogenetic TGFÎ² Signaling Systems. Advanced Biology, 2021, 5, e2101008.	2.5	1
13	A PTEN variant uncouples longevity from impaired fitness in Caenorhabditis elegans with reduced insulin/IGF-1 signaling. Nature Communications, 2021, 12, 5631.	12.8	15
14	Label-free multiplexed microtomography of endogenous subcellular dynamics using generalizable deep learning. Nature Cell Biology, 2021, 23, 1329-1337.	10.3	47
15	An inducible system for inÂvitro and inÂvivo Fas activation using FKBP-FRB-rapamycin complex. Biochemical and Biophysical Research Communications, 2020, 523, 473-480.	2.1	3
16	Mutations in FAM50A suggest that Armfield XLID syndrome is a spliceosomopathy. Nature Communications, 2020, 11, 3698.	12.8	38
17	Dynamic Fas signaling network regulates neural stem cell proliferation and memory enhancement. Science Advances, 2020, 6, eaaz9691.	10.3	11
18	Optogenetic control of mRNA localization and translation in live cells. Nature Cell Biology, 2020, 22, 341-352.	10.3	49

#	Article	IF	Citations
19	Non-invasive optical control of endogenous Ca2+ channels in awake mice. Nature Communications, 2020, 11, 210.	12.8	40
20	Optogenetic tools for dissecting complex intracellular signaling pathways. Biochemical and Biophysical Research Communications, 2020, 527, 331-336.	2.1	13
21	Optogenetic Modulation of TrkB Signaling in the Mouse Brain. Journal of Molecular Biology, 2020, 432, 815-827.	4.2	11
22	Optogenetic activation of intracellular antibodies for direct modulation of endogenous proteins. Nature Methods, 2019, 16, 1095-1100.	19.0	95
23	Locally Activating TrkB Receptor Generates Actin Waves and Specifies Axonal Fate. Cell Chemical Biology, 2019, 26, 1652-1663.e4.	5.2	26
24	Noninvasive optical activation of Flp recombinase for genetic manipulation in deep mouse brain regions. Nature Communications, 2019, 10, 314.	12.8	48
25	Intensiometric biosensors visualize the activity of multiple small GTPases in vivo. Nature Communications, 2019, 10, 211.	12.8	30
26	Spatiotemporal Control of TGF-Î² Signaling with Light. ACS Synthetic Biology, 2018, 7, 443-451.	3.8	34
27	Salmonellaexploits host Rho GTPase signalling pathways through the phosphatase activity of SopB. Cellular Microbiology, 2018, 20, e12938.	2.1	22
28	Reciprocal control of excitatory synapse numbers by Wnt and Wnt inhibitor PRR7 secreted on exosomes. Nature Communications, 2018, 9, 3434.	12.8	42
29	Synergistic Ensemble of Optogenetic Actuators and Dynamic Indicators in Cell Biology. Molecules and Cells, 2018, 41, 809-817.	2.6	7
30	Cell-matrix adhesion and cell-cell adhesion differentially control basal myosin oscillation and Drosophila egg chamber elongation. Nature Communications, 2017, 8, 14708.	12.8	56
31	Optogenetic protein clustering through fluorescent protein tagging and extension of CRY2. Nature Communications, 2017, 8, 30.	12.8	107
32	Correlative three-dimensional fluorescence and refractive index tomography: bridging the gap between molecular specificity and quantitative bioimaging. Biomedical Optics Express, 2017, 8, 5688.	2.9	71
33	LAR-RPTP Clustering Is Modulated by Competitive Binding between Synaptic Adhesion Partners and Heparan Sulfate. Frontiers in Molecular Neuroscience, 2017, 10, 327.	2.9	25
34	Nonislet Cell Tumor Hypoglycemia in a Patient with Adrenal Cortical Carcinoma. Case Reports in Endocrinology, 2016, 2016, 1-4.	0.4	6
35	Release of Infectious Hepatitis C Virus from Huh7 Cells Occurs via a trans -Golgi Network-to-Endosome Pathway Independent of Very-Low-Density Lipoprotein Secretion. Journal of Virology, 2016, 90, 7159-7170.	3.4	41
36	Optogenetic toolkit reveals the role of Ca ²⁺ sparklets in coordinated cell migration. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 5952-5957.	7.1	57

#	Article	IF	Citations
37	Optogenetic oligomerization of Rab GTPases regulates intracellular membrane trafficking. Nature Chemical Biology, 2016, 12, 431-436.	8.0	58
38	Neurotrophin-3 Regulates Synapse Development by Modulating TrkC-PTPÏƒ Synaptic Adhesion and Intracellular Signaling Pathways. Journal of Neuroscience, 2016, 36, 4816-4831.	3.6	56
39	PLEKHG3 enhances polarized cell migration by activating actin filaments at the cell front. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 10091-10096.	7.1	27
40	Exosome engineering for efficient intracellular delivery of soluble proteins using optically reversible proteinâ€“protein interaction module. Nature Communications, 2016, 7, 12277.	12.8	420
41	Optogenetic Control of Fibroblast Growth Factor Receptor Signaling. Methods in Molecular Biology, 2016, 1408, 345-362.	0.9	4
42	Protein Inactivation by Optogenetic Trapping in Living Cells. Methods in Molecular Biology, 2016, 1408, 363-376.	0.9	5
43	Optogenetic control of cell signaling pathway through scattering skull using wavefront shaping. Scientific Reports, 2015, 5, 13289.	3.3	39
44	Optogenetic control of endogenous Ca2+ channels in vivo. Nature Biotechnology, 2015, 33, 1092-1096.	17.5	147
45	Lpg0393 of Legionella pneumophila Is a Guanine-Nucleotide Exchange Factor for Rab5, Rab21 and Rab22. PLoS ONE, 2015, 10, e0118683.	2.5	16
46	Optogenetic regulation of cellular functions through an intact skull using wavefront shaping. , 2015, , .		0
47	Structural basis for LAR-RPTP/Slitrk complex-mediated synaptic adhesion. Nature Communications, 2014, 5, 5423.	12.8	94
48	Light-inducible receptor tyrosine kinases that regulate neurotrophin signalling. Nature Communications, 2014, 5, 4057.	12.8	123
49	Spatiotemporal Control of Fibroblast Growth Factor Receptor Signals by Blue Light. Chemistry and Biology, 2014, 21, 903-912.	6.0	161
50	Reversible protein inactivation by optogenetic trapping in cells. Nature Methods, 2014, 11, 633-636.	19.0	183
51	Formin-mediated actin polymerization promotesSalmonellainvasion. Cellular Microbiology, 2013, 15, 2051-2063.	2.1	22
52	Real-time single-molecule co-immunoprecipitation analyses reveal cancer-specific Ras signalling dynamics. Nature Communications, 2013, 4, 1505.	12.8	66
53	VipD of Legionella pneumophila Targets Activated Rab5 and Rab22 to Interfere with Endosomal Trafficking in Macrophages. PLoS Pathogens, 2012, 8, e1003082.	4.7	89
54	Phosphoinositides Differentially Regulate Protrudin Localization through the FYVE Domain. Journal of Biological Chemistry, 2012, 287, 41268-41276.	3.4	33

#	Article	IF	Citations
55	The crossregulation between ERK and PI3K signaling pathways determines the tumoricidal efficacy of MEK inhibitor. Journal of Molecular Cell Biology, 2012, 4, 153-163.	3.3	65
56	Cooperative Activation of PI3K by Ras and Rho Family Small GTPases. Molecular Cell, 2012, 47, 281-290.	9.7	146
57	Salmonella exploits Arl8B-directed kinesin activity to promote endosome tubulation and cell-to-cell transfer. Cellular Microbiology, 2011, 13, 1812-1823.	2.1	43
58	Comparative analysis of the role of small G proteins in cell migration and cell death: Cytoprotective and promigratory effects of RalA. Experimental Cell Research, 2011, 317, 2007-2018.	2.6	14
59	A hidden incoherent switch regulates RCAN1 in the calcineurinâ€“NFAT signaling network. Journal of Cell Science, 2011, 124, 82-90.	2.0	45
60	Endocytic Rab proteins are required for hepatitis C virus replication complex formation. Virology, 2010, 398, 21-37.	2.4	57
61	Visualizing dynamic interaction between calmodulin and calmodulin-related kinases via a monitoring method in live mammalian cells. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 3412-3417.	7.1	18
62	The Phosphoinositide Phosphatase SopB Manipulates Membrane Surface Charge and Trafficking of the Salmonella-Containing Vacuole. Cell Host and Microbe, 2010, 7, 453-462.	11.0	144
63	Comprehensive Identification of PIP3-Regulated PH Domains from C. elegans to H. sapiens by Model Prediction and Live Imaging. Molecular Cell, 2008, 30, 381-392.	9.7	150
64	Phospholipase D Activity Regulates Integrin-mediated Cell Spreading and Migration by Inducing GTP-Rac Translocation to the Plasma Membrane. Molecular Biology of the Cell, 2008, 19, 3111-3123.	2.1	84
65	Participation of Rab5, an Early Endosome Protein, in Hepatitis C Virus RNA Replication Machinery. Journal of Virology, 2007, 81, 4551-4563.	3.4	111
66	A network of Rab GTPases controls phagosome maturation and is modulated by Salmonella enterica serovar Typhimurium. Journal of Cell Biology, 2007, 176, 263-268.	5.2	151
67	siRNA screen of the human signaling proteome identifies the PtdIns(3,4,5)P3-mTOR signaling pathway as a primary regulator of transferrin uptake. Genome Biology, 2007, 8, R142.	9.6	54
68	PI(3,4,5)P3 and PI(4,5)P2 Lipids Target Proteins with Polybasic Clusters to the Plasma Membrane. Science, 2006, 314, 1458-1461.	12.6	703
69	An inducible translocation strategy to rapidly activate and inhibit small GTPase signaling pathways. Nature Methods, 2005, 2, 415-418.	19.0	379
70	STIM Is a Ca2+ Sensor Essential for Ca2+-Store-Depletion-Triggered Ca2+ Influx. Current Biology, 2005, 15, 1235-1241.	3.9	1,907
71	Direct Interaction of a Divergent CaM Isoform and the Transcription Factor, MYB2, Enhances Salt Tolerance in Arabidopsis. Journal of Biological Chemistry, 2005, 280, 3697-3706.	3.4	246
72	Switch-of-Function Mutants Based on Morphology Classification of Ras Superfamily Small GTPases. Cell, 2003, 113, 315-328.	28.9	102

#	Article	IF	Citations
73	Identification of Calmodulin Isoform-specific Binding Peptides from a Phage-displayed Random 22-mer Peptide Library. Journal of Biological Chemistry, 2002, 277, 21630-21638.	3.4	29
74	Identification of a Calmodulin-Regulated Soybean Ca2+-ATPase (SCA1) That Is Located in the Plasma Membrane. Plant Cell, 2000, 12, 1393-1407.	6.6	102
75	Competitive binding of calmodulin isoforms to calmodulin-binding proteins: implication for the function of calmodulin isoforms in plants. BBA - Proteins and Proteomics, 1999, 1433, 56-67.	2.1	44
76	Reciprocal Regulation of Mammalian Nitric Oxide Synthase and Calcineurin by Plant Calmodulin Isoformsâ€. Biochemistry, 1998, 37, 15593-15597.	2.5	65
77	Differential Activation of NAD Kinase by Plant Calmodulin Isoforms THE CRITICAL ROLE OF DOMAIN I. Journal of Biological Chemistry, 1997, 272, 9252-9259.	3.4	68
78	Identification of a Novel Divergent Calmodulin Isoform from Soybean Which Has Differential Ability to Activate Calmodulin-dependent Enzymes. Journal of Biological Chemistry, 1995, 270, 21806-21812.	3.4	139