Roberto Zoncu

List of Publications by Year
in descending order

62 papers	20,657 citations	61857 43 h-index	133063 59 g-index
67 all docs	67 docs citations	67 times ranked	27744 citing authors

#	Article	IF	Citations
1	mTOR: from growth signal integration to cancer, diabetes and ageing. Nature Reviews Molecular Cell Biology, 2011, 12, 21-35.	16.1	3,464
2	Ragulator-Rag Complex Targets mTORC1 to the Lysosomal Surface and Is Necessary for Its Activation by Amino Acids. Cell, 2010, 141, 290-303.	13.5	2,001
3	The CoQ oxidoreductase FSP1 acts parallel to GPX4 to inhibit ferroptosis. Nature, 2019, 575, 688-692.	13.7	1,756
4	A lysosome-to-nucleus signalling mechanism senses and regulates the lysosome via mTOR and TFEB. EMBO Journal, 2012, 31, 1095-1108.	3.5	1,507
5	mTORC1 Senses Lysosomal Amino Acids Through an Inside-Out Mechanism That Requires the Vacuolar H ⁺ -ATPase. Science, 2011, 334, 678-683.	6.0	1,369
6	Ragulator Is a GEF for the Rag GTPases that Signal Amino Acid Levels to mTORC1. Cell, 2012, 150, 1196-1208.	13.5	777
7	Lysosomal amino acid transporter SLC38A9 signals arginine sufficiency to mTORC1. Science, 2015, 347, 188-194.	6.0	662
8	Efficiency of siRNA delivery by lipid nanoparticles is limited by endocytic recycling. Nature Biotechnology, 2013, 31, 653-658.	9.4	660
9	Origin of GABAergic neurons in the human neocortex. Nature, 2002, 417, 645-649.	13.7	629
10	Transcriptional control of autophagyâ€“lysosome function drives pancreatic cancer metabolism. Nature, 2015, 524, 361-365.	13.7	624
11	The lysosome as a cellular centre for signalling, metabolism and quality control. Nature Cell Biology, 2019, 21, 133-142.	4.6	599
12	Asymmetric apportioning of aged mitochondria between daughter cells is required for stemness. Science, 2015, 348, 340-343.	6.0	463
13	The Folliculin Tumor Suppressor Is a GAP for the RagC/D GTPases That Signal Amino Acid Levels to mTORC1. Molecular Cell, 2013, 52, 495-505.	4.5	436
14	Recruitment and regulation of phosphatidylinositol phosphate kinase type 1Î³ by the FERM domain of talin. Nature, 2002, 420, 85-89.	13.7	420
15	The Lysosome as a Regulatory Hub. Annual Review of Cell and Developmental Biology, 2016, 32, 223-253.	4.0	412
16	DGAT1-Dependent Lipid Droplet Biogenesis Protects Mitochondrial Function during Starvation-Induced Autophagy. Developmental Cell, 2017, 42, 9-21.e5.	3.1	397
17	Lysosomal cholesterol activates mTORC1 via an SLC38A9â€“Niemann-Pick C1 signaling complex. Science, 2017, 355, 1306-1311.	6.0	386
18	Regulation of mTORC1 by the Rag GTPases is necessary for neonatal autophagy and survival. Nature, 2013, 493, 679-683.	13.7	374

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19	A Phosphoinositide Switch Controls the Maturation and Signaling Properties of APPL Endosomes. Cell, 2009, 136, 1110-1121.	13.5	311
20	A Role of the Lowe Syndrome Protein OCRL in Early Steps of the Endocytic Pathway. Developmental Cell, 2007, 13, 377-390.	3.1	258
21	Loss of endocytic clathrin-coated pits upon acute depletion of phosphatidylinositol 4,5-bisphosphate. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 3793-3798.	3.3	240
22	The lysosome as a command-and-control center for cellular metabolism. Journal of Cell Biology, 2016, 214, 653-664.	2.3	226
23	Defective Regulation of Autophagy upon Leucine Deprivation Reveals a Targetable Liability of Human Melanoma Cells InÂVitro and InÂVivo. Cancer Cell, 2011, 19, 613-628.	7.7	203
24	ERâ€“lysosome contacts enable cholesterol sensing by mTORC1 and drive aberrant growth signalling in Niemannâ€“Pick type C. Nature Cell Biology, 2019, 21, 1206-1218.	4.6	193
25	Emerging Roles for the Lysosome in Lipid Metabolism. Trends in Cell Biology, 2017, 27, 833-850.	3.6	181
26	Transcriptional activation of RagD GTPase controls mTORC1 and promotes cancer growth. Science, 2017, 356, 1188-1192.	6.0	165
27	Recurrent mTORC1-activating RRAGC mutations in follicular lymphoma. Nature Genetics, 2016, 48, 183-188.	9.4	160
28	A Unified Approach to Targeting the Lysosome's Degradative and Growth Signaling Roles. Cancer Discovery, 2017, 7, 1266-1283.	7.7	159
29	Two synaptojanin 1 isoforms are recruited to clathrin-coated pits at different stages. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 19332-19337.	3.3	147
30	Covalent targeting of the vacuolar H+-ATPase activates autophagy via mTORC1 inhibition. Nature Chemical Biology, 2019, 15, 776-785.	3.9	118
31	The inositol 5-phosphatase SHIP2 regulates endocytic clathrin-coated pit dynamics. Journal of Cell Biology, 2010, 190, 307-315.	2.3	117
32	Identification of an oncogenic RAB protein. Science, 2015, 350, 211-217.	6.0	113
33	Structural mechanism of a Rag GTPase activation checkpoint by the lysosomal folliculin complex. Science, 2019, 366, 971-977.	6.0	108
34	NPC1-mTORC1 Signaling Couples Cholesterol Sensing to Organelle Homeostasis and Is a Targetable Pathway in Niemann-Pick Type C. Developmental Cell, 2021, 56, 260-276.e7.	3.1	101
35	A PH domain within OCRL bridges clathrin-mediated membrane trafficking to phosphoinositide metabolism. EMBO Journal, 2009, 28, 1831-1842.	3.5	96
36	Dynamics of mTORC1 activation in response to amino acids. ELife, 2016, 5, .	2.8	92

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37	Hybrid Structure of the RagA/C-Ragulator mTORC1 Activation Complex. Molecular Cell, 2017, 68, 835-846.e3.	4.5	77
38	The Lysosome at the Intersection of Cellular Growth and Destruction. Developmental Cell, 2020, 54, 226-238.	3.1	77
39	A nutrient-induced affinity switch controls mTORC1 activation by its Rag GTPaseâ€“Ragulator lysosomal scaffold. Nature Cell Biology, 2018, 20, 1052-1063.	4.6	72
40	Internalization, Intracellular Trafficking, Biodistribution of Monoclonal Antibody 806: A Novel Anti-Epidermal Growth Factor Receptor Antibody. Neoplasia, 2007, 9, 1099-1110.	2.3	67
41	Dynamics and architecture of the NRBF2-containing phosphatidylinositol 3-kinase complex I of autophagy. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 8224-8229.	3.3	63
42	Structure of the C9orf72 ARF GAP complex that is haploinsufficient in ALS and FTD. Nature, 2020, 585, 251-255.	13.7	55
43	Positive and Negative Regulation of the Master Metabolic Regulator mTORC1 by Two Families of Legionella pneumophila Effectors. Cell Reports, 2017, 21, 2031-2038.	2.9	54
44	Lysosomal retargeting of Myoferlin mitigates membrane stress to enable pancreatic cancer growth. Nature Cell Biology, 2021, 23, 232-242.	4.6	41
45	PC3 overexpression affects the pattern of cell division of rat cortical precursors. Mechanisms of Development, 2000, 90, 17-28.	1.7	36
46	Cadmium-induced apoptosis in murine fibroblasts is suppressed by Bcl-2. Archives of Toxicology, 2001, 75, 313-320.	1.9	29
47	Organelle transporters and inter-organelle communication as drivers of metabolic regulation and cellular homeostasis. Molecular Metabolism, 2022, 60, 101481.	3.0	29
48	Built to last: lysosome remodeling and repair in health and disease. Trends in Cell Biology, 2022, 32, 597-610.	3.6	24
49	NBEAL1 controls SREBP2 processing and cholesterol metabolism and is a susceptibility locus for coronary artery disease. Scientific Reports, 2020, 10, 4528.	1.6	20
50	Lysosomal recycling of amino acids affects ER quality control. Science Advances, 2020, 6, eaaz9805.	4.7	19
51	PhotoGate microscopy to track single molecules in crowded environments. Nature Communications, 2017, 8, 13978.	5.8	13
52	The TASCC of Secretion. Science, 2011, 332, 923-925.	6.0	12
53	Free sialic acid storage disorder: Progress and promise. Neuroscience Letters, 2021, 755, 135896.	1.0	12
54	4Î²-Hydroxycholesterol is a prolipogenic factor that promotes SREBP1c expression and activity through the liver X receptor. Journal of Lipid Research, 2021, 62, 100051.	2.0	10

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55	Finding Sugar in the Pantry: How Galectins Detect and Signal Lysosomal Damage. Molecular Cell, 2018, 70, 5-7.	4.5	7
56	Measuring Spatiotemporal Dependencies in Bivariate Temporal Random Sets with Applications to Cell Biology. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2008, 30, 1659-1671.	9.7	4
57	Seventh BHD international symposium: recent scientific and clinical advancement. Oncotarget, 2022, 13, 173-181.	0.8	4
58	Analyzing Protein-Protein Spatial-Temporal Dependencies from Image Sequences Using Fuzzy Temporal Random Sets. Journal of Computational Biology, 2008, 15, 1221-1236.	0.8	3
59	Recruitment and regulation of phosphatidylinositol phosphate kinase type 1Î³ by the FERM domain of talin. , 0, .		1
60	Rhomboids Distort Time and Space: Accelerated Proteolysis through Membrane Disruption. Biochemistry, 2019, 58, 2093-2094.	1.2	0
61	Picking the arginine lock on PQLC2 cycling. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, e2112682118.	3.3	0
62	A zinc-sensing protein gives flies a gut feeling for growth. Nature, 2020, 580, 187-188.	13.7	0